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Monarch
SEED & FEED CO.

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'48 GARDEN ANNUAL

MONARCH SEED & FEED CO., MEDFORD, OREGON

TED'S FEED & SEED STORE, Ashland, Oregon Branch





Down-to-earth help for garden planners

This seed catalog, we're proud to say, sets a new high record for helpfulness. We believe it contains more real, solid gardening data than any seed catalog we've ever read.

As you'll see, we have crammed this book with FACTS. We've set down here, as far as is humanly possible, the practical answers to the hundreds of questions that every seedsman is asked, every year.

Whether you are an experienced gardener or a beginner, we're sure you'll find much that is helpful in these pages—now and later on. We suggest, then, that you can begin using this book the very day you receive it. Use it first as a guide for your planning—and later, as a guide for more effective action all through the season.

Please note that our seed listings, in all departments are held down to sensible limits. We have selected, with great care, the varieties that we consider most suitable for our area—and we've stopped right there. You may see other catalogs with more voluminous lists, but you won't find any more conscientious selections than ours.

Because of rapidly changing market conditions we must remind you that

**ALL PRICES
IN THIS CATALOG
ARE SUBJECT TO CHANGE
WITHOUT NOTICE**

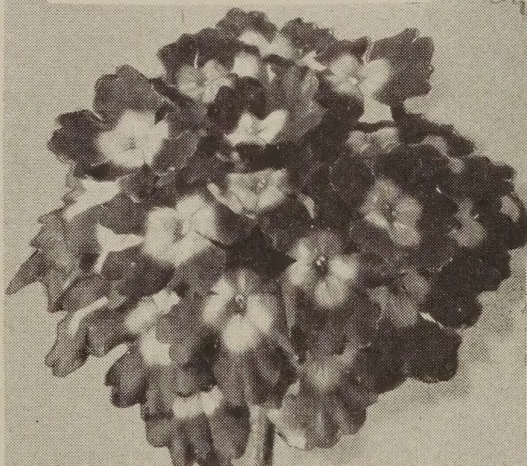
Again IT'S FLOWERS!

NOW THE GARDEN PENDULUM
SWINGS BACK TO BEAUTY



BACHELORS BUTTON, Jubilee Gem (below)—Another All-America winner. Finest of all Bachelor's Buttons for borders or beds. Deep blue, all double, Pkt. 15c.

ASTER, El Monte—A bright crimson Super-Giant Aster. All-American Bronze Medal winner. Striking in garden or for bouquets. Packet 20c.



ZINNIA, Stardust (below)—A Golden Yellow Fantasy that belongs in every garden. Excellent cut flower. All-American. Med. size dbl. flowers. Pkt. 15c.

VERBENA, Lavender Glory—Huge blossoms, true lavender color with creamy-white eyes. All-America award. Distinctly lovely fragrance. Packet 15c.



COSMOS, Sensation—An All-America Silver Medal winner. These huge pink or white flowers will blossom within 10 weeks from seed. Packet 15c.

NON-WARRANTY CLAUSE—Success with seeds, bulbs, etc., depends largely on weather conditions and proper cultivation, so in accordance with the universal custom of the seed trade we give no warranty, express or implied, as to the productiveness of any seeds, bulbs or plants we sell and will not be in any way responsible for the crop. Our liability is limited to the purchase price of the seed, bulbs or plants.

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Hello NEIGHBOR!



**We offer a
complete year-round, local
garden service**

There's a year-round working partnership between us and our gardening customers. They like to shop here, because they know that, whatever the season, we're always ready to counsel with them and to supply all their garden needs.

Here's a Spring greeting from **YOUR Seed Store**

... a neighborly, friendly and informative message from a seedsman who lives, works, and gardens right in your own home territory.

We are proud to present this book as a message from neighbor to neighbor! We're sure you will find it extremely valuable. But before you plunge into its fascinating pages, we want to say this:

Our job, as we see it, is to **serve the gardeners and growers of our own area**, above all. We work, always, with the needs of our own neighbors' gardens in mind. We know, from experience, exactly what these local needs are. And we choose our stocks carefully and conscientiously to suit these needs.

May we suggest, then, that it is far wiser for gardeners of this area to shop here, rather than to look afar for their garden seeds and supplies?

Monarch
SEED & FEED CO.
MEDFORD, OREGON

TED'S FEED AND SEED STORE, Ashland, Oregon Branch

**We offer
only good, fresh seeds,
packet or bulk**

We get along so well with our gardening friends because they know we do everything in our power to bring them the best of seeds, always! A packet or a ton, for home gardener or professional grower, it's always the finest we can procure.

**We offer
a complete supply service
for all gardeners**

One excellent reason why you **NEED** the services of a store like ours is the **COMPLETENESS** of our service. As seed professionals, we know what you'll need at every step of the way. That's why it's so satisfying to shop here for garden supplies.

**We offer
cheerful and expert
garden counsel**

Our practical knowledge of gardening is part of our stock in trade. We want all your gardening efforts to be successful, and we try to do all we can to make them so. As "Garden Headquarters" we feel that's part of our job! Come in and talk it over!

LAWN BUILDING . . . HOW? WHEN? WHERE?

Consider Your Soil

In the garden, each spring brings a new chance to add humus or to otherwise improve the tilth of your soil. Once a good sod has been built up, however, the only way you can change the soil under it is by feeding the grass itself. That is why it pays to build up the soil before you begin. Organic matter must be added before work begins. Well-rotted compost, old manure, peat moss, sifted compost and leaf mold are all good forms that will help produce a deep-rooted healthy turf. Note that these must be old and well-rotted—fresh organic matter can damage young grass by rotting and releasing gases in the soil, and by encouraging disease. Spread a layer of organic matter from one to three inches deep over the entire area. Over this, apply 25 to 30 pounds of good mixed fertilizer for every 1,000 square feet, and turn under both organic matter and fertilizer. Grass roots do not go deep on soils with good drainage. There is no need to dig much deeper than five inches. The mixed fertilizer will give the grasses a good start and the humus will help hold moisture, and by slow decay, release small amounts of plant food for years.

Final Soil Preparation

After digging, level the surface with a rake. For large areas, a drag made by tying ropes to both ends of a ladder or heavy timber and dragging this sideways will help cut off the humps and fill the low spots. When as level as possible, divide the seed into two lots. Try to sow on as still a day as possible. Sow one lot of seed with the breeze and the other against. This

will spread the seed more evenly, so that each square foot of lawn will have enough, but not too much seed.

Seeding

A common mistake is to sow too thickly. Grass seedlings will not grow when crowded any more than will seedlings of cabbage or lettuce. At the same time, enough seed should be used to cover the entire area without bare spots. Half a pound of mixed seed to 100 square feet or five pounds to 1,000 square feet is safe for most mixtures, and good lawns can be made with as little as 3 pounds to 1,000 feet if conditions are right.

After sowing, rake the lawn again. Don't keep pulling the rake one way, which will roll over the coarse particles and bury the seed too deeply. Instead, work it back and forth with short strokes, barely coating the seed with dust and soil.

Water with a fine spray as soon as the seed is sown. This is the only time in the life of a lawn that it should be sprinkled or sprayed. At all other times, give it a good soaking whenever watering is needed, but for this first wetting, we want to settle the soil gently around the seed and moisten it enough to start germinating. If the normal soil moisture is enough to keep the lawn just slightly damp, try not to water again until the soil has germinated, but do not let it get dry at any time.

Once the green seedlings are showing over the entire lawn and there is little danger of washing out the soil, water thoroughly if rain does not fall. The first seedlings to show will be the nurse grass, and probably not the grasses that will form the permanent lawn.



Mowing

Don't mow the lawn until it is about three inches high. Then set the mower for a 1½ inch cut (adjust the roller until there is 1½ inches between the bedknife and the floor on which the mower stands). Don't mow a new lawn closer than this—the grass needs this much leaf area if it is to build up strength enough to stool out and form a permanent turf that will survive the coming winter.

Reseeding Bald Spots

Sometimes thin spots will remain in the lawn, particularly if conditions are unfavorable for the permanent grasses. These can be seeded with Italian ryegrass, which will germinate in hot weather, when good grasses will not. With the return of cooler weather in fall, these temporary patches can be raked out and the regular mixture seeded.

To remake established lawns that are in poor shape, rake the thin spots as early in spring as possible, apply 25 pounds of good general fertilizer to every 1,000 square feet, and sow one pound of a good mixture to every 400 to 500 square feet. Rake in the seed and sprinkle. From this point on, treat as a new lawn.

Complete LAWN WEED CONTROL . . . at your command

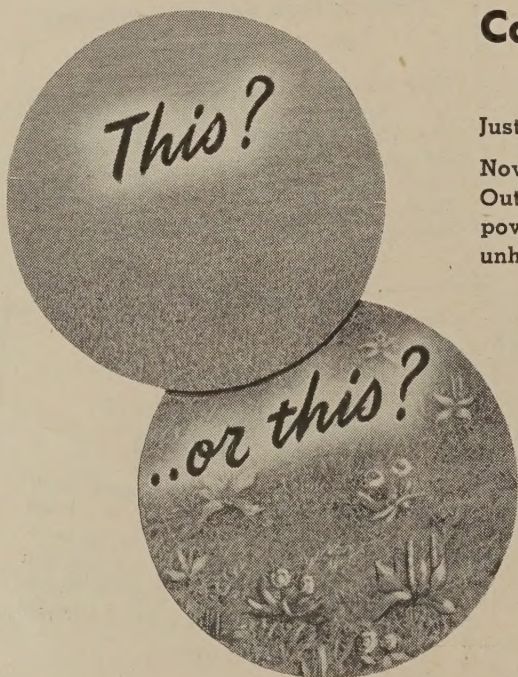
Just a few short years ago, weed-free lawns were a rarity.

Now, almost overnight, weed control has become easy, almost automatic. Out of the laboratories have come new chemicals with the miraculous power to kill the common lawn weeds while leaving the turf itself unharmed.

Today, weeds in the home lawn are completely unnecessary and out-of-date . . . in fact, they may well be classified as just "bad housekeeping."

We are a bit proud of our own part in this modern lawn revolution. Ever since the new weed control chemicals began to appear, we've been prescribing and providing them for the lawns of our area. We know them thoroughly. We can tell you exactly which controls to use—and when. And we have them in stock.

Please be sure, then, to look up the weed killers described later on in this book. And if you have any questions about them, be sure to consult us.





DEPENDABLE LAWN SEEDS

4 - W A Y SERVICE

for your lawn

1—The right seed

The "better lawns" we sell here get their start with the right seed . . . seed carefully selected for the growing conditions of this territory—and for the particular needs of your own lawn.

2—The right foods

Whatever the feeding problems of your lawn, we have the right plant foods for it. All-purpose lawn foods or special fertilizers for special conditions—they're all here for you, in any amount you need.

3—Tested weed controls

The weeds in your lawn will be fighting a losing battle if you let us furnish your ammunition. We have the full range of weed controls to choose from—and can show you how to vanquish lawn weeds easily and surely.

4—Complete lawn know-how

Last, but perhaps most important of all, our 4-way lawn service includes competent advice whenever you want it—advice based on thorough knowledge of the lawn problems of this particular territory. We have the necessary know-how—and it's at your command!

Monarch VELVETY LAWN GRASS MIXTURE

THIS PERFECTLY BLENDED LAWN GRASS MIXTURE WILL GIVE YOU A LAWN YOU CAN MOW IN SIX WEEKS FROM PLANTING. VELVETY LAWN Grass Mixture is a combination of grasses and clover mixed in such proportions as to give you a quick, sturdy and beautiful lawn. The faster growing grasses contained in Velvety Mixture serve as nurse crops for the slower growing varieties which are eventually the dominating grasses of the mixture.

We placed Velvety Mixture on the market many years ago and from time to time have improved the blend by reducing some of the proportions and increasing the quantities of better grasses contained in the mixture until now in our IMPROVED VELVETY MIXTURE we have a grass that pleases wherever it is planted. Rate of seeding is 1 lb. to 250 sq. ft. **Price, lb. \$1.00 (by mail \$1.10).**

Monarch SHADY LAWN MIXTURE

It is difficult to grow a lawn under the shade of trees unless shade-loving grasses are selected. We have made up a mixture of such grasses in combination with White Dutch Clover. This mixture will produce a luxuriant lawn beneath the shade of trees. Our Shady Lawn

Mixture will solve that "shade problem" and give you just the turf you have always wished for. Shade-loving grasses dominate this mixture insuring success in your efforts to get grass started under shade trees. Seeding is 1 lb. to 250 sq. ft. **Price, lb. \$1.25 (by mail \$1.35).**

STRAIGHT LAWN SEEDS

Creeping Red Fescue. This is the lawn grass you'll hear much about as time goes on. Creeping Red Fescue combines the close growing qualities of Bent Grass with the dark green colors of Fescue. The grass blades are very fine texture, and the grass most sturdy and hardy. The finer lawns of the future will be planted to Creeping Red Fescue because of its enduring beauty and ruggedness. Red Fescue is not susceptible to brown patch and fungus

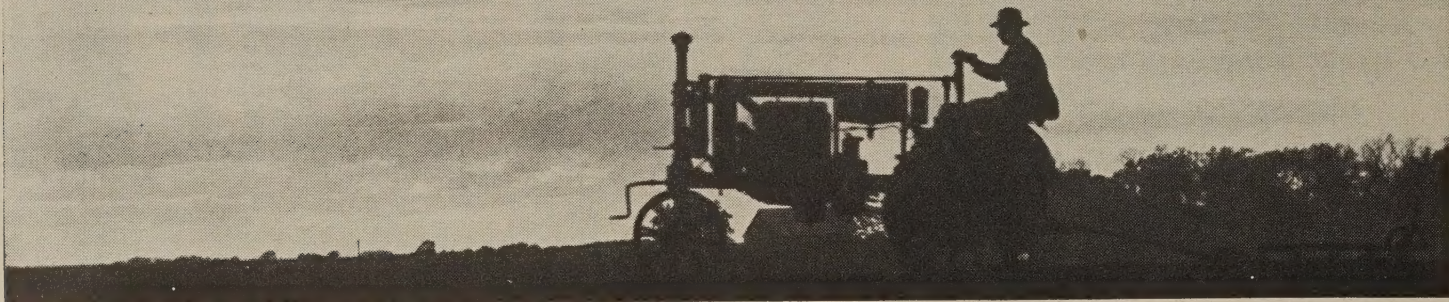
diseases that attack Bent Grasses. **Per lb. \$1.00, postpaid.**

Highland Bent Grass. For the finer lawns use Highland Bent. Particularly adapted to interior regions. **Per lb. \$1.30, postpaid.**

Chewing Fescue. A valuable grass, Especially good in shady places. Produces an upright turf of very fine texture. **Extra Fancy Seed, per lb. \$1.10, postpaid.**

White Dutch Clover. Extra fancy seed, free of weeds, of high germination. **Per lb. \$1.25, postpaid.**

FARM SEEDS



FIELD GRASS SEEDS

Alta Fescue (Tall Fescue). Tall Fescue is rapidly gaining in popularity and has supplanted Meadow Fescue in many areas. It is somewhat coarser than Meadow Fescue, but is more drought-resistant, more productive, and more alkali-tolerant. Livestock find it fully as palatable. The growth period, and other characteristics are the same except that Meadow Fescue is probably preferable on wet lands. **Lb. \$1.00; 10 lbs. \$9.00, postpaid.** Write for quantity prices.

Red Top (Herds Grass). Sow 12 to 15 pounds per acre. This is one of the most valuable and satisfactory grasses in all localities. Thrives on low ground, where water stands late in the season. Red Top should be included in all mixtures intended for permanent pastures or hay. It makes excellent pasturage as well as ideal for hay. When well established it spreads and will supplant other grasses. Fine for hillsides, will prevent erosion. Matures at the same time as Meadow Fescue, Orchard Grass and Timothy. **Lb. 55c; 10 lbs. \$5.00, postpaid.**

Timothy. The Most Extensively Grown Hay Grass. Sow 12 to 15 pounds per acre. For hay, Timothy is the best known and most extensively grown of all grasses. A stand is easily established, it is inexpensive to sow, it starts quickly and yields its best crop the year after it is sown, but the following year's crop may be equally as heavy if liberally top-dressed with manure. The yield on good land frequently runs from 1½ to 3 tons per acre. Meadow Fescue or Kentucky Blue Grass, Red Top or Herds Grass and Ladino Clover all mature at the same time as Timothy, and are good grasses to sow with it for hay and pasture. A good mixture is 6 pounds Timothy, 5 pounds Red Top, 7 pounds Meadow Fescue and 4 pounds Ladino Clover. Sow this mixture at the rate of 20 pounds per acre. Price of Timothy is **30c per lb., 10 lbs. \$2.75, postpaid.** Write for quantity prices.

Oregon Rye Grass. A rapid grower, very winter hardy, leaves and stems medium fine, stools heavily, has a bright green color. Excellent for pas-

ture or for hay. Plant with Ladino Clover to prevent bloating. Sow 20 pounds per acre. **Lb. 30c, 10 lbs. \$2.75, postpaid.**

Brome Grass. Will stand drought and produce heavy crops in dry sections and on poor soils where other grasses perish. It is one of the hardiest growers and succeeds on our dry hillsides. Sow 35 pounds per acre. **Lb. 60c, 10 lbs. \$5.50, postpaid.**

Orchard Grass. The greatest pasture and hay grass. A very vigorous grower and yields large crops of excellent and nutritious hay, as well as having special value as a pasture grass, furnishing good grazing from early spring until winter. It adapts itself to a variety of soils, provided they are well drained, but succeeds best on loamy uplands or moderately stiff soils, although it does quite well on soils that are inclined to be sandy. A mixture of 15 pounds of Orchard Grass, and 8 pounds of Red or Alsike Clover has proved very satisfactory, is recommended for hay and pasture. When sown alone, plant 30 to 35 pounds per acre. In a mixture as above, sow 20 pounds per acre. **Lb. 50c, 10 lbs. \$4.50, postpaid.** Write for quantity prices.

Monarch Meadow Mixture. This is a combination of grasses and clover, ideal

for permanent pasture or for hay. Combine the following grasses and clover in perfect proportions: Eng. Rye Grass, Kentucky Blue Grass, Tall Fescue, Timothy, Alsike, Red and White Sweet Clover, and Orchard Grass. We have sold this blend for years and receive many compliments on the mixture. Plant Monarch Meadow Mixture for a real fine pasture. **Lb. 50c, 10 lbs. \$4.50, postpaid.** Write for quantity price.

English Rye Grass (Perennial). A quick grower and excellent for pasture or hay. Unlike Oregon Rye Grass, English Rye is a perennial which persists for years. It is a heavy yielder and of excellent quality as hay. English Rye Grass should be used in every pasture or meadow mixture. **Postpaid, small lots price, lb. 40c; 10 lbs. \$3.50.** Write for quantity price.

Sudan Grass. A wonderful quick-growing Summer Hay Grass. An annual with short fibrous roots that are killed by frost. Because of this characteristic, Sudan Grass will never become a pest as will Johnson Grass. Its greatest value is for hay, which is well liked by stock—the entire plant, leaves, stems and heads, is eaten. Sow 5 to 6 pounds to the acre in 2-foot rows; 20 to 25 pounds broadcast. **By mail postpaid, lb. 35c; 5 lbs. \$1.50.** Write for quantity prices.



ALFALFA AND CLOVER SEEDS

ALFALFA SEED

Ladak Alfalfa. This comparatively new variety gives promise of becoming popular and rightly so for it has developed that Ladak is ideally adapted to dry soils which cannot successfully grow the more common varieties. Ladak Alfalfa will produce one heavy crop on dry soils, after which, in case the moisture is not sufficient to continue its growth, it will survive through the season to come again after winter rains have revived it. Other varieties of alfalfa will almost completely die out but not so with Ladak. It may appear completely dead, but will come again, when fall rains bring moisture. Ladak is likewise strongly resistant to freezing. In many tests Ladak has proved superior to all others for the cold and dry conditions found in the northern Great Plains areas and it has also given good results under irrigation in the Northwest. If you desire further information on Ladak alfalfa write us for descriptive bulletin.

Grimm Alfalfa. The hardiest of all alfalfa and will stand the severest winters of our mountain sections. It has a branching root growth that gives the plant a firm hold on the soil and prevents heaving by frequent freezing and thaws, and also adapts it to shallower soils. If your soil has a hard-pan near

the surface, or if your farm is in the mountain section, it will pay you to give Grimm the preference. Being short rooted, Grimm will thrive on soils where the water table is close to the surface. Grimm is very leafy and fine stemmed and is preferred by most hay buyers. Sow Grimm 8 pounds per acre after frost danger is over. Fertilize with Soil Sulphur or Superphosphate for bumper crops the first season. We handle only State Sealed and Certified Grimm seed.

Common or Chilean Alfalfa. This is the popular long-rooted variety so universally grown. Best adapted to deep soils. We handle only the hardiest types of Chilean, selecting our seed from growing districts which produce seed of true type. Our mountain grown seed will produce stands of longer duration and prove more profitable to plant.

CLOVERS

Red Clover. The standard clover for all purposes. Makes an excellent hay when mixed with Timothy. Succeeds well on most any soil. Inoculate seed before planting and you'll be sure to get a stand. **Lb. 70c; 10 lbs. \$6.50, postpaid.**

Alsike Clover. This is a perennial adapted for hay or pasture. A valuable crop for bee pasture. Does well either on poor dry soils or in wet rich soil. Being finer, brighter and not so dusty. Alsike hay is preferred to Red Clover. Inoculate all clovers and be sure to get a stand. **Lb. 70c; 10 lbs. \$6.50, postpaid.** Write for quantity prices.

Ladino Clover. Pastures more cattle and hogs than any other clover with the possible exception of Strawberry Clover which is fast coming into importance as a clover pasture crop. Ladino is

perennial, heavy producing and very palatable. It grows 12 to 18 inches tall. Ladino increases milk flow, improves soil, will thrive on shallow moist soils and is the first clover to awaken in the spring and the last plant to quit in the fall. Prepare a fine seed bed and sow the seed at the rate of 6 pounds per acre. Cover lightly with a brush harrow. If you use a sloping tooth harrow, set the teeth back to the limit to avoid covering too deeply. To prevent bloating include grasses such as Rye Grass, Orchard Grass or Fescue. **Prices: Blue Tag, \$3.00 per lb.; Red Tag, \$2.55 per lb.; Pasture grade (contains Alsike Clover), \$2.35 per lb.** Prices postpaid.

White Blossom Sweet Clover. Sweet clover is one of the most important soil improving crops. Withstands adverse conditions of soil and weather better than alfalfa and red clover. Does not winterkill. Produces more on this land than alfalfa and red clover and is equal to alfalfa and red clover in nutritive value. Sow it on lands too poor, too worn out, too sandy for other crops and bring the land into condition to produce profitable crops. Make the seedbed fine and compact and cover the seed lightly. Plant 20 pounds to the acre from February to March. We offer only scarified, hulled, fancy seed, free of dodder, of high purity and germination. Prices postpaid: **Lb. 45c; 10 lbs. \$4.00.**

Crimson Clover. Very productive and greedily eaten by cattle. An annual clover. Remains green longer than Red Clover and is excellent for bee food. Largely used for green manuring. Sown in August it may be plowed under the following June. Sow 15 lbs. per acre. **Per lb. 50c; 10 lbs. \$4.50, postpaid.**

Monarch
SEED & FEED CO.
MEDFORD, OREGON

BARLEY

Velvon. A new, heavy-yielding, non-lodging strain of bearded barley. Velvon is winter hardy or yields well, spring planted. Because of its upright growing head Velvon does not lodge as do other barleys. Velvon produces heavy, plump, white kernels and its beards are almost entirely awnless. In Talent Trials, planted in the spring of 1942, Velvon yielded 102.5 bushels per acre. Planted as late as May 4, 1943, this barley yielded 83.4 bushels per acre. We offer Blue Tag Certified seed.

Haanchen. Best adapted for spring planting. Used as brewing grain. A good yielder on heavy soil. Haanchen threshes out bread-free and is very popular with feeders by reason of the low-fibre content. Haanchen is the heaviest weight barley grown. Not recommended for fall sowing.

Trebi. A winter-hardy, heavy yielding variety for Southern Oregon. Suited and recommended for spring sowing in colder areas. Trebi yielded 104 bushels per acre at the Southern Oregon Trials at Talent, Oregon. Trebi is very heavy, white in color with a thin hull. Trebi

has been successfully grown in Southern Oregon as well as Eastern Oregon and is recognized as one of the heaviest yielding bearded strains of barley.

WHEAT

White Federation No. 38. (Rust-resistant). Introduced by us in 1941, it proved all that was claimed for it. Heavy-yielding—1942 Talent Trial yield was 72 bushels per acre. Planted on May 4, 1943, this variety yielded 52 bushels per acre without irrigation. Highly resistant to stem rust and bunt smut. Gaining in popularity each year. Beardless variety. Write for prices on Blue Tag Certified Seed.

Alicel. This is a comparatively new Club variety. Kernels are large, white and heads are heavily filled. Alicel has been tested for three years in the Southern Oregon Trials at Talent, Oregon and found to be truly a heavy yielding variety with a stiff straw which resists lodging. Yields of 60 bushels per acre have been recorded.

SEED GRAINS

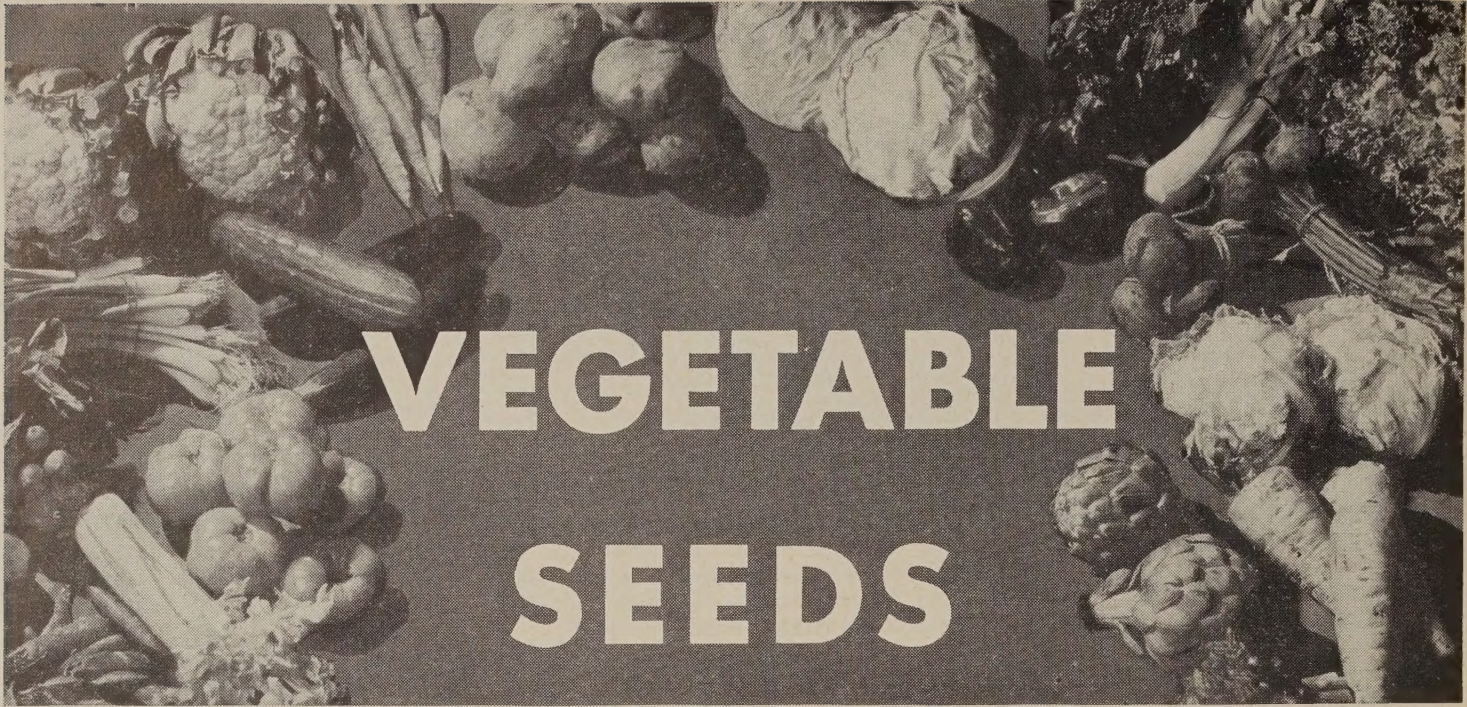
OATS

Kanota. Still the favorite red oat because of its early maturity and heavy yielding qualities. Not particularly suited for fall planting. We recommend Black Swedish or Winter Gray Oats for fall sowing.

Winter Gray Oats. Best suited for fall planting. Heaviest yielding oat for hay but matures later than Kanota. Very leafy with slender stalks. We do not recommend Gray Oats be planted with Alfalfa as they are not substantially developed when the first cutting is taken off. Black Swedish or Kanota would be best for the purpose.

BLACK SWEDISH. Very heavy yielding. Suited best for planting with vetch in the fall as it matures evenly with the vetch. Also fine for spring planting. Bears large kernels, produces abundance of hay, stems coarse but tender and sweet. Heaviest yielding oat for hay.

WRITE FOR QUANTITY PRICES



VEGETABLE SEEDS

DWARF OR BUSH BEANS

HOW TO GROW DWARF OR BUSH BEANS. One pound will plant a row 100 feet long; about 1¼ bushels to the acre. Make the rows 18 inches or 2 feet apart, and drop the beans 4 inches apart in the row. If the soil is warm and loose, plant 2 inches deep; if rather cold and wet, plant only one inch deep. Beans, especially the yellow-podded varieties, will rot very easily if planted when the soil is wet and the atmosphere is cold. Cultivate often but never when the plants are wet, as this brings on rust. Special prices to market gardeners. Send your list to us for prices.

GREEN PODDED VARIETIES

Prices postpaid: Pkt. 10c; ½ lb. 35c; 1 lb. 65c

Dwarf Tendergreen has "won its spurs" and is today's outstanding variety. Matures in 54 days from planting. Plants large, erect, productive. Pods are round, fleshy, stringless and of the finest flavor. Seeds brown, mottled with light fawn. Include Dwarf Tendergreen in your garden this season.

Improved Stringless Green-Pod. Matures in 48 days. High quality for home and market garden. Splendid as a canning variety or for snap beans. Plant heavily productive. Pods medium green; 5½ inches long, almost ½ inch wide and equally thick; very fleshy, strictly stringless, fine grained, tender. Seeds coffee brown. Pods similar to Giant Stringless Green Pod but a trifle shorter and thicker.

Navy Beans. Matures in 90 days. This is the favored dry bean for baking and for soups. Very small, seed pure white, vines thrifty and very productive.

Pencilpod Black Wax. Plant large and thrifty; heavily productive over long period. Pods handsome, bright yellow; 5½-6 in. long, ⅜ in. thick, cylindrical; very fleshy, strictly stringless, brittle, fine grained and tender; quality unexcelled. Seeds black.

Golden Wax. Matures in 48 days. A splendid home garden variety; also much used for canning. Plant small, productive. Pods very attractive; golden yellow; 4½ to 5 inches long; ½ inch wide, thick, oval; fleshy, brittle, stringless. Seeds white, splashed with violet-carmine and purple.

POLE OR RUNNING VARIETIES

Prices postpaid: Pkt. 10c; ½ lb. 35c; 1 lb. 65c, unless otherwise noted.

CULTURE. One pound will plant 50 hills, 30 pounds per acre. The soil should be warm. Lay the ground out in hills 4 feet apart each way, and set poles 8 to 10 feet long firmly in the hills before planting the seed. Plant 5 or 6 beans in a hill and cover about 2 inches deep; leave three plants at each pole, and when a few inches high draw a little earth around them as support. Many gardeners consider it an advantage to set the poles when planting.

Oregon Giant. A very desirable snap bean. A good climber and very prolific. Pods long, thick-flat, stringless when young, exceedingly tender, rather broad, meaty, pods splashed purplish blue.

Blue Lake Bean. Matures in 62 days. A splendid snap bean for home garden and early market. Good climber, heavily productive. Pods light green, 5½ inches long, ½ inch wide, almost as thick; nearly stringless, very fleshy, brittle, tender. Seeds white; excellent for baking. Because of the near-stringless character of this variety it is preferred by many to Kentucky Wonder.

Kentucky Wonder (Old Homestead). Matures in 65 days. Unexcelled for home garden and for market. Excellent climber, thrifty, heavily productive. Pods medium green; 9 to 10 inches long, nearly round and ½ inch in diameter; slightly stringy, very fleshy, brittle, tender. Prices at top of page.

Scarlet Runner. Matures about same as Limas. Good climber. Flowers scarlet, decorative. Pods dark green; 6 inches

long, flat oval; fleshy; desirable for snaps and green shell beans. Very attractive as porch or arbor cover. Pkt. 15c; ½ lb. 50c; 1 lb. 90c.

London Horticultural (Speckled Cranberry). Ready for snaps in 65 days; green shell beans in 74 days. Splendid for home and market garden. Good climber, thrifty, heavily productive. Pods green, becoming splashed with carmine at green shell stage; 7 inches long, wide, straight, stringless. Prices at top of page.

LIMA BEANS

Prices postpaid: Pkt. 10c; ½ lb. 35c; 1 lb. 65c.

King of the Garden Lima. Matures in 88 days. Climber, heavily productive. Pods 6 inches long, 1¼ inches wide, ⅜ inch thick, usually with 4 or 5 beans. Seeds large, thick, flat, white. An improved strain of large White Lima.

Burpee's Bush Lima. Matures in 75 days. Plant large, heavily productive. Pods large, 4½ to 5 inches long, 1¼ inches wide, ⅜ inch thick; usually contain 4 large, thick beans. Dry beans large, flat, greenish-white.

Cangreen Bush Lima. All America Selection, Honorable Mention 1943. Sixty-eight days to maturity. Cangreen is notable for the green color of fleshy part of the seed in the dry stage. Attractive for canning or for freezing. Very prolific . . . yielding a large crop of pods and seeds.

All Vegetable Seeds
10¢ PER PACKET
UNLESS OTHERWISE NOTED

In bulk at money-saving prices.
Special quotations to market gardeners.
Prices subject to change without notice.

MONARCH CARRIES A COMPLETE LINE OF GARDEN TOOLS

HOW? WHEN? WHERE? WHY?

Practical answers to every-day questions about home gardening

Cut living costs! Grow your own food!

Now, more than ever before, YOU NEED A GARDEN!

With sky-high food prices, a garden is a better investment than ever! Back in the days when food prices were reasonable, a nation-wide survey showed that, *for every dollar spent on home gardens, the average return in vegetables was more than ten dollars.* Today, the ratio is far higher.

Think of the prices you'll have to pay this year, if you buy fresh vegetables in the markets! It's not a very pleasant thought, is it? But you can beat these high prices—by *growing your own!* And what's more, you'll have fun doing it. There's no more pleasant and healthful occupation than gardening!

So make your plans now for a thorough attack on high food prices! *Let your own garden provide what you need!*

DON'T expect your garden to grow itself—advance planning will cut down the amount of work needed, will make it more productive and will provide a constant flow of all the fresh vegetables you can eat.

How Much to Plant

Figure exactly the number of feet of row to plant. Consult the chart on page 20. Decide how many times during the harvest season you want to eat a certain crop, how much of that crop you ordinarily serve to your family, and plant accordingly. Thus, if you like beans, and if you want to serve them twice a week, 1 pound at a serving, note that a 50 foot row will produce about 20 pounds. Since beans produce freely for about three weeks, a 30 foot row should give you all the

snap beans your family cares to eat during that time. Why tend 50 feet of row when 30 will do?

DO plan to make succession seedings. Work your garden full time by planting a good summer garden that will produce until frost. And DO make provision for canning, for freezing and for storing.

Succession Seeding

DON'T work more land than you need to. Conserve your energy by intercropping, catch cropping and succession cropping. In intercropping, short season crops are grown between slower growing plants (i.e., plant early lettuce between rows of tomato plants that won't need the space until after the lettuce is eaten). In catch crop-

ping, plant an early crop *before* the main crop is planted. In succession cropping the main crop comes first (i.e., snap beans to be followed by late turnips). In this way you make better use of space, cut down the number of rows to tend, and make better use of water and fertilizers.

In the smaller garden, concentrate on vegetables that lose quality most rapidly when shipped any distance—delicately flavored green beans, summer squash, early cabbage and leaf lettuce. Unless you have plenty of room, better leave late cabbage, dry onions, winter squash and potatoes to commercial gardeners.

Poor Soil

DON'T plant in water-logged or poorly-drained soil. If your garden doesn't drain readily, either find another plot or provide tile drainage. No soil will grow good root crops that dries out hard and compact. If the cost of conditioning such soil is too high, as in plots to be used only one year, omit carrots, beets, etc., and concentrate on leafy vegetables and those that produce above ground, such as tomatoes, peppers, etc. You can remake such soil by adding well-rotted organic matter. This may be old manure, spent mushroom manure, peat moss, rotted compost, etc. If coal ashes have weathered for at least a year, they will help break up clay also. So will an application of lime. On the other hand, light sands can also be improved by adding liberal amounts of organic matter.



BROCCOLI, Italian Green Sprouting



PEPPER, Pimento



CUCUMBER, Straight Eight



SQUASH, Table Queen



KOHLRABI, White Vienna

BEANS, Burpee's Stringless Green Pod

BEANS LIMA, Burpee's Improved Bush

BEETS

Special prices to market gardeners. Send your list to us for prices.

Early Blood Turnip. A medium early variety for home and market garden use. Matures in 65 to 70 days from seed. Tops medium, but somewhat coarse. Roots top-shaped; dark red. Flesh bright red with zones of lighter shade. **Pkt. 10c, oz. 30c; ¼ lb. 80c, postpaid.**

Detroit Dark Red. Matures in 52 to 55 days. The standard of excellence in table beets for home and market garden, for shipping, and for canning. Tops uniform, small, slender, erect. Roots globe-shaped; symmetrical, with small collar and small tap-root; very dark, blood-red. Interior very uniform in color, the zones so inconspicuous that the flesh seems to be one solid ball of deep blood-red meat; remains tender and of highest quality until roots are full grown. **Pkt. 10c; oz. 30c; ¼ lb. 80c. Postpaid.**

Swiss Chard (Sea Kale). Large Ribbed White. The leaves are broad, somewhat waved, but smooth, and of a medium light yellowish-green. The stalks are broad and flattened, but tender and succulent. **Pkt. 10c; oz. 25c; ¼ lb. 65c. Postpaid.**

Rhubarb Chard. A new Swiss Chard that looks like rhubarb. The leaf stalks are bright, translucent, crimson; the rich color extends out through the veins into the dark green, heavily crumpled leaves. Easily grown; thrives everywhere. You will enjoy the different, tasty, delicious flavor of Rhubarb Chard. Very decorative in the flower garden. **Pkt. 15c.**

MANGEL-WURZELS

Giant Half Sugar Mangel. Roots long and ovoid, grayish-white with light rose-colored shoulder; flesh white, rich in sugar. An immense yielder. **Oz. 20c; ¼ lb. 55c.**

Mammoth Long Red. Superior to strains offered previously. Roots large, long spindle-shape, straight, and thick; grows 1/3 to 1/2 out of ground; light red; flesh white tinged rose. Heavy yielding. **Oz. 20c; ¼ lb. 55c.**

CABBAGE

Finest Early Sorts

Copenhagen Market. Matures in 66 days. Distinctly and uniformly early. Splendid for early market and shipment; proving valuable as early kraut variety. Plant small, compact, allowing very close planting; stem short; heads uniformly round; firm; become 6 to 7 inches in diameter; weight 3½ to 4 pounds. Interior clear white and of excellent quality. **Pkt. 10c; oz. 65c.**

Early Jersey Wakefield. Matures in 62 days. Extremely early variety very valuable for home and market garden as well as for shipment. Plants very small and compact, allowing close planting; stem is short. Heads firm and conical, usually 7 inches long, 5 inches thick near base; weight 2 to 2¼ pounds. **Pkt. 10c; oz. 55c.**

Early Dwarf Flat Dutch. Matures in 71 days. Excellent for home and market garden. Plants small and compact; stem short. Heads almost ball-shaped; commonly 7 to 8 inches in diameter, 6 inches deep and weigh 4½ to 5 pounds; firm and of high quality. **Pkt. 10c; oz. 75c.**



GOLDEN ACRE CABBAGE

Golden Acre Cabbage. Matures in 60 to 64 days. The earliest round headed cabbage; especially valuable for early market and shipping. Plants very small and compact; stem short; heads uniformly round; firm, commonly 6 inches in diameter and weight 3 pounds. This is similar to Copenhagen Market but is several days earlier, and the heads are smaller. It is as early as Early Jersey Wakefield. Because of the absence of large surplus outleaves, Golden Acre can be planted closer in the row and the rows nearer, meaning more heads per acre. **Pkt. 10c; oz. 65c.**

Late Sorts

Danish Ballhead or Hollander (short stemmed strain). Matures in 90 to 100 days. The best late cabbage. Plants are medium sized with short stem. Heads large; flattened globe-shape, become 8 to 9 inches across, 6 to 7 inches deep, and weigh 7 to 9 pounds. Very firm and solid, of excellent quality, and keep perfectly in storage until late spring. **Pkt. 10c; oz. 65c.**

Giant Late Flat Dutch. Matures in 105 days. The best very large, late cabbage; popular for home and market garden and for fall shipment; a good keeper. Heads very large and flat, but deep; become 12 to 14 inches across, 7 inches deep; and weigh 12 to 14 pounds or more; firm and of good quality. **Pkt. 10c; oz. 70c.**

BRUSSELS SPROUTS

Dwarf Improved. A carefully grown strain; very hardy and giving compact, round sprouts of large size and good quality. **Pkt. 15c.**

BROCCOLI

Culture. Plant in open ground in May and June, transplanting later when plants are of sufficient strength and size to place in field. Culture same as for Cabbage or Cauliflower.

St. Valentines. Fine quality, immense header, ready for market early. Heads remain in good condition longer than most varieties. **Pkt. 15c.**

Italian or Sprouting. The standard variety of sprouting broccoli. Grown for home garden, for market and recently in large quantities for freezing. Plants very large and vigorous, reaching 2½ to 3 ft. under good conditions with central head 5 to 6 in. in diameter. **Pkt. 10c.**

CARROTS

Culture. Carrot seed can be sown early and late in Western Washington, as soon as the ground can be worked in February, carrots may be sown. They like a well cultivated and loamy soil. Use fertilizer liberally. Sow in rows (table varieties) 16 to 18 inches apart, and for field culture sow in drills 18 to 24 inches apart. Cover one-half to an inch deep and firm soil well over seed.

Tendersweet or Improved Imperator.

This carrot grows to a length of 6 to 7 in. with a shoulder diameter of ¼ to 1½ inches and is a deep orange color. It has smooth crown, does not have undesirable side shoots; has a fine texture and is very sweet. In all respects it is very attractive for shipping. An ideal bunching carrot. **Pkt. 10c; oz. 35c; ¼ lb. 95c.**

Danver's Half Long. The roots are a rich dark orange color and by reason of its symmetrical shape, which is long and pointed, makes an excellent bunching variety. It has proved over a period of years to be the most popular carrot. **Pkt. 10c; 1 oz. 30c; ¼ lb. 80c.**

Red Cored Chantenay. A very fine red cored carrot with uniformity and appealing color. Smooth symmetrical shape combined with just the right size make it a good market or home garden carrot. Roots 5½-6 in. long, 2¼ in. thick at shoulder, tapered, stumprooted. **Pkt. 10c; oz. 30; ¼ lb. 80c.**

Nantes Coreless Carrot. Matures in 68 days. One of the best for home garden and early market. Tops small. Roots bright orange; 6 to 7 inches long, 1¼ inches thick; cylindrical; stumprooted. Flesh bright orange, of highest quality; core inconspicuous. Undoubtedly one of the best carrots grown. Not a tapering variety. Fine for bunching. **Pkt. 10c; oz. 35c; ¼ lb. 95c.**

CAULIFLOWER

Early Snowball. This is the most popular for home garden and market. Produces a good crop and a sure header. **Pkt. 15c. Postpaid.**

USE MONARCH VEGETABLE SEEDS AND BE SURE— THERE IS NO SUBSTITUTE FOR GARDEN FRESH VEGETABLES



**BEETS, Crosby's Egyptian (Center)
Early Wonder (Left)
Detroit Dark Red (Right)**



RHUBARB CHARD



ONIONS, Yellow Globe Danvers



TOMATO, Jubilee



CANTALOUPE, Hale's Best



EGG PLANT, Black Beauty

HOW? WHEN? WHERE? WHY?

Practical answers to every-day questions about home gardening

Extra Feeding

DON'T **DEPEND** on organic matter only for *feeding* your vegetables. While it has some fertility value, it won't provide enough. Remember that vegetables growing in a garden are in an artificial environment. You don't want *natural* growth; you want crops to mature as soon as possible, and this means *extra* feeding with suitable fertilizers. Properly used, chemical fertilizers furnish plant food at lowest cost in most readily available form.

DO make provisions for extra feedings through the summer as plants grow and take fertility from the soil.

When to Use Lime

DON'T apply lime unless it is really needed! It is good, of course, for the purpose of breaking up heavy clay soil. A good check on the need for lime is the way your beets grow. Usually a garden soil that will grow good beets contains enough lime. If beets do poorly, or if sheep sorrel grows vigorously, apply about 50 lbs. of hydrated lime or 100 lbs. of ground limestone to every 1,000 sq. ft. of garden. If you have a pH tester, most flowers and vegetables grow well in a soil that tests between 6.0 and 7.0.

Before You Dig

Before digging or plowing the garden, apply 2½ to 3 lbs. of balanced fertilizer over every 100 sq. ft. of garden. Divide fertilizer into two lots, sowing one with the wind and the other

across the wind. Or, better yet, use a fertilizer spreader.

Next, make a mud pie test. Pick up a handful of soil and pat it lightly into a mud pie or cake. If this can be crumbled into loose soil easily, the soil is all right to dig. If it hangs together, it is too wet; don't dig.

Spading the Garden

The average home garden can be dug easily in five or six days, if done in stages. Usually, a hand-dug garden is in better condition than one that has been plowed. Start by digging a trench the depth and width of a spade. Wheel the dirt from this trench around to the other side of the garden, where you plan to finish digging. Throw the dirt from succeeding rows into the trench made by the previous spade cut. The last cut is then filled with the earth wheeled from the first.

Spading vs. Plowing

DON'T allow bad plowing to spoil your soil. Many a garden plot has been ruined by a heavy tractor that worked it too wet. Be sure your soil passes the mud pie test before you allow a plowman to touch it. Too often, regular farm equipment is too heavy for working garden soils.

DON'T work your soil too much. Remember that after you finish digging or plowing, your soil has been fluffed up and loosened, so plant roots can grow through it easily. Every time you go over it you are packing it down, making it less suitable for

growing plants. Most inexperienced gardeners overdo surface preparation by trying to work the surface into a fine dust. Clods should be broken up, stones raked off and trash removed, within sensible limits. If the soil was dug at the right mud pie point, most lumps should break up without too much additional cultivation.

DO use a cord or garden line stretched across the garden in laying out rows. Crooked rows increase the work needed. Also, they waste space. Open furrows for sowing seed by running the end of a hoe handle along a taut cord. For most seeds this should not be more than ½" deep; 1" deep for peas, beans, corn, etc. Fine seeds should not be covered more than ¼" in the furrow. If your soil cakes or crusts badly, use clean sand, or a mixture of 50/50 sand and leaf mold, or peat moss, to cover the seed. This loose mixture does not cake and allows the tender seedlings to break through readily.

Where it is important to catch light rainfall, corn, peas, beans, etc. can be sown at the bottom of a 3" to 4" furrow, but should not be covered with more than 1" of soil.

A hill is a hole! Many gardeners think a "hill" for planting squash, cucumbers and melons is actually a pile of earth. But a hill means a shallow depression filled with rich earth, not a mound. This depression catches extra moisture that the vine crops need for rapid growth. Vine crops will grow better if you can dig in lots of well-rotted manure or compost underneath.

SWEET CORN

Tendermost (Hybrid). Matures in 80 days. Of all the hybrids developed, this is the most tender. You'll love its giant-size kernels with their sugary-sweet corn goodness, and delightfully tender hull. Ears average about nine inches in length, with 14 to 16 rows of amazingly regular kernels. Tendermost stays sweet and tender on the stalk for nearly two weeks at a time. It's easy growing, high-yielding . . . and the best yet for quality eating, canning and freezing. **Pkt. 15c; ½ lb. 50c; lb. 85c.**

Alphagold Bantam (Hybrid). Matures in 60 days. If you want to lead your neighborhood with the best quality early sweet corn, plant Alphagold Bantam. The rapid growth of this extra early yellow hybrid will amaze you. Yields well, ears are about 7 inches long and tips are well filled. Resistant to ear worms. **Pkt. 15c; ½ lb. 50c; lb. 85c.**

Golden Cross Bantam (Hybrid). Matures in 90 days. Still a favorite. The original hybrid variety. Twelve rows to the ear. Stalks sturdy and productive. Better adapted for growing under varied conditions. **Pkt. 10c; ½ lb. 40c; lb. 65c.**

Golden Bantam. Matures in 78 days. This is the old open-pollinated variety. Many still prefer it to the Hybrid varieties, but it's yield is much less per acre and worms are a problem which is not the case with Hybrid varieties. **Pkt. 10c; ½ lb. 30c; lb. 50c.**

POP CORN

Robust Hulless. Most profitable and popular; short ears, white pointed kernels. **Pkt. 10c; ½ lb. 20c; lb. 35c.**

Golden Pearl Yellow. A giant yellow corn. Pops into mammoth creamy yellow, tender, fluffy kernels. **Pkt. 15c; ½ lb. 30c; lb. 50c.**

CUCUMBERS

Colorado or A & C. Matures in 68 days from seed. A beautifully long, slender, dark green cucumber of excellent shape and intense dark color which is maintained longer than in any other variety. Very few seeds. **Pkt. 10c; oz. 45c; ¼ lb. \$1.25.**

Early White Spine. Matures in 60 days. The most popular white spined cucumber for the home garden; extensively grown for shipping. Fruits medium dark green; remain in good condition remarkably long; 7 inches long; 2½ inches thick; slightly tapered; blunt. **Pkt. 5c; oz. 35c; ¼ lb. 95c.**

Chicago Pickling. Most widely used of pickling varieties. Uniform and attractive; also good for slicing. Fruits medium green, square ended; very prolific. **Pkt. 10c; oz. 35c; ¼ lb. 95c.**

Lemon Cucumber. Matures in 65 days. Fine for preserves. Yellow in color, fruits round. Fine for salads. Every garden should contain a few hills of Lemon Cucumber. **Pkt. 15c; oz. 50c.**

Straight-8. This outstanding new variety produces symmetrical, cylindrical fruits about 8 inches long and 1½ inches in diameter. The fruits are well rounded at the ends and when in condition for use are deep green and free from objectionable striping or tipping. Ideal for shipping or for home or market garden. **Pkt. 10c; oz. 45c; ¼ lb. \$1.25.**

CELERY

Utah. A very desirable green type early maturing celery. Becoming very popular. **Pkt. 15c, postpaid.**

KALE

1000 Headed or Cow Kale. Frequently attains a growth of 6 to 8 feet and produces many of the smooth leaves. Largely used for feeding stock and poultry. **Pkt. 10c; oz. 25c; ¼ lb. 65c.**

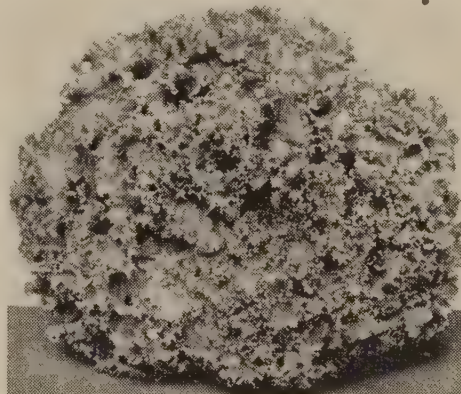
Dwarf Curled Scotch. Long plume-like leaves with edges finely cut. **Pkt. 10c; oz. 50c.**

LETTUCE

Great Lakes. All America Winner in 1943. Iceberg type of lettuce. Similar to Imperial No. 847. It stands heat and sun extremely well and is slow in throwing its seed head. It is also resistant to tip burn. Outstanding for home gardeners and used extensively by truck gardeners operating for the market. **Pkt. 15c; oz. \$1.00; ¼ lb. \$3.00.**

Imperial No. 847. Best suited for summer crops. A very popular variety among market gardeners. Good shipper. Resistant to brown blight. Crisp heading plants of medium size. Leaves smooth, thick, medium light green. Heads round, well folded, firm with low seed stalk. **Pkt. 10c; oz. 65c; ¼ lb. \$1.85.**

New York No. 515. Similar in habit and head formation to New York No. 12, but color is brighter green and the head somewhat better formed and smoother. Sure-heading and resists tip-burn in warm weather as well as any firm heading lettuce. At present used principally for summer lettuce on land not infected with brown blight, but with distinct promise in all sections of the country for spring head lettuce. Not well adapted to fall harvest due to tendency to bolt under unfavorable conditions. **Pkt. 10c; oz. 50c; ¼ lb. \$1.40.**



GRAND RAPIDS LETTUCE

ALL MONARCH GARDEN
SEED PRICES
ARE POSTPAID
★ ★
ORDER NOW

Grand Rapids. One of the most popular loose leaved varieties. Excellent for early planting outside, and for greenhouse forcing. Plants erect and compact; leaves light green, broad, wavy, curly and heavily fringed at the edges. Handsome sort; very tender and sweet when grown under glass. Early maturing. **Pkt. 10c; oz. 35c; ¼ lb. 95c.**

Imperial No. 152. This variety is an improved Los Angeles type. Best suited for Fall and late Summer planting. Very sure heading and can be grown under a wide range of conditions. Resistant to brown blight. Very firm, round exposed heads. **Pkt. 10c; oz. 65c; ¼ lb. \$1.85.**

KOHLRABI

Early White Vienna. Very early; bulb white; best table variety. **Pkt. 10c; oz. 50c. Postpaid.**

MUSKMELON

Bender's Surprise. A very delicious muskmelon. Earlier than Hales Best and Hearts of Gold. Delicious salmon-fleshed melon, very popular. Fruits are medium to large; oval; distinctly ribbed and covered with slight patches of netting; skin light yellow when ripe. You'll like Bender's Surprise as a home-garden or market melon. **Pkt. 10c; oz. 40c; ¼ lb. \$1.10.**

Hales Best. An outstanding early shipping cantaloupe. Planted extensively in all melon growing sections, for early shipping. Fruits oval; inconspicuous ribbing with heavy netting. Flesh extremely thick, salmon-orange, sweet and of fine quality. An excellent keeper and a good shipper. Seed cavity very small. Earlier than Superfecto, matures in 85 to 90 days. **Pkt. 10c; oz. 40c; ¼ lb. \$1.10. Postpaid.**

Hearts of Gold. Still a dominating favorite. Quality extremely fine. Well netted except a narrow stripe between shallow ribs. Holds its color well. Very firm and a good shipper. Deep golden flesh is of the finest quality. Sweet, spicy and distinctly flavored. Hearts of Gold, because of its outstanding flavor will always remain a favorite. No garden is complete without it. Matures in 92 days. **Pkt. 10c; oz. 40c; ¼ lb. \$1.10. Postpaid.**

Rockyford. Everyone knows this melon. It is one of the old standbys. **Pkt. 10c; oz. 40c; ¼ lb. \$1.10. Postpaid.**

BUY THE BEST SEED—IT'S THE CHEAPEST IN THE LONG RUN

WATERMELONS

Striped Klondike. Right for the present this variety is the most popular watermelon in the Southern Oregon district, both for home market and shipping. The flavor is fine, texture unexcelled, a good shipper and very attractive with its mottled skin. Thin rind with small brown seeds. Matures about the same time as Brown Seeded Klondike; in about 85 days. We suggest that you plant this variety for main crop. **Pkt. 10c; oz. 35c; ¼ lb. 95c.**

Monarch Brown Seeded Klondike. (Early maturing strain.) Flesh deep red, very sweet, flavor of the best, rind thin, dark green and tough enough to allow shipping to nearby market. Stem end square, center full, tapering slightly to the blossom end. A favorite on the Pacific Coast. One of the best flavored melons we have ever offered. Usually weighs about 25 pounds. We offer the earliest maturing strain. You can buy cheaper seed, but never better. **Pkt. 10c; oz. 35c; ¼ lb. 95c. Postpaid.**

Klondike R7 (Wilt resistant). Developed by Dr. D. R. Porter of the University of California. Resistant to fusarium wilt. Quite similar to Brown Seeded Klondike Strain, but when young the melons show a distinct bloom and at maturity they are smoother and show less furrowing. **Pkt. 10c; oz. 50c; ¼ lb. \$1.50.**

OKRA

Perkins Long-Pod Spineless. Highly productive; pods rich green, straight, moderately ridged and of high quality. Similar to Perkin's Greenpod but spineless. **Pkt. 10c; oz. 25c.**

CASABAS

Prices Postpaid

Golden Beauty. Fruits are nearly globular, of bright golden yellow color. Flesh is white, very thick and juicy. **Pkt. 10c; oz. 40c; ¼ lb. \$1.10.**

Persian (Small Variety). Matures in 115 days. Requires long season to attain perfection; widely grown for market. Fruits globular, skin very green; netted. Flesh thick; bright orange; of distinct flavor when melons are fully ripe. **Pkt. 10c; oz. 45c; lb. \$1.25.**

MUSTARD

Southern Giant Curled. This is a giant curled leaf of fine quality. **Pkt. 10c; oz. 20c.**

ONIONS

California Early Red Globe. Very early. Color quite red, bright outer covering. Very attractive, good keeper, mild and productive. One of the leading varieties on the California market. Globe shaped. **Pkt. 10c; oz. 95c; ¼ lb. \$2.75.**

Sweet Spanish (Utah Strain). This strain of Sweet Spanish has been bred up to keeping quality perfection. Originally the Spanish strain of this type did not have the keeping quality, hence seed breeders set to work to include the necessary keeping propensities. Such will be found in our Sweet Spanish.

This is a very sweet and early onion. Most of you know it for its extreme high characteristics. Early, mild, excellent keeper, heavy yielder. Increasingly popular with the market and home gardener. Large, yellow, globular, with the market and home gardener. Large, yellow, globular, flesh white, very sweet and of pleasing flavor. Desirable for shipping. **Pkt. 10c; oz. 70c; ¼ lb. \$2.00, postpaid.**



SWEET SPANISH ONION

Yellow Globe Danvers. One of the most extensively used main crop yellow onions for the home garden. Here's what our grower says about our seed: "Our selection and breeding have developed a strain which has the early ripening habit and small neck of the original Danvers and yet is more globular and prolific than the parent type. The bulbs are medium to large sized, uniformly globe shaped and white fleshed, with a crispness and an excellent mild flavor. Highly recommended." Could you ask for more in an onion? **Pkt. 10c; oz. 90c; ¼ lb. \$2.60.**

Crystal White Wax. A most attractive onion. An offspring of White Bermuda. Pure white in color, being waxy in appearance. Largely grown for the market but highly recommended to the home gardener. **Pkt. 10c; oz. 90c; ¼ lb. \$2.70. Postpaid.**

ONION PLANTS

We can supply Crystal Wax or Sweet Spanish Onion plants after March 15th. Will make either young green onions or can be left to mature for dry onions. **Prices postpaid. 1 bundle of 100 plants (count is approximate) 40c, 5 bundles \$1.85, 10 bundles \$3.50.**

PEAS

Tall Telephone or Alderman. Mid-season sort. Vines 4 to 4½ feet tall. Heavily loaded with very large, well formed pods, often 5 to 5½ inches long. Light yellowish-green and normally contain 8 to 10 very delicious, large peas. **Pkt. 10c; ½ lb. 30c; lb. 50c.**



ALDERMAN PEAS

Early Alaska (Wilt Resistant). An extremely early variety and the most widely grown pea for canning purposes. Also used by market gardeners where earliness is first consideration. Vines 33 inches tall, slender and light green in color. Very uniform at time of maturity. Pods borne singly, very plump, blunt end. Seeds small, round, medium green with bluish cast. This strain has now replaced the original type of Alaska as it has all the good qualities of the parent stock and in addition is fully resistant to Fusarium wilt. **Pkt. 10c; ½ lb. 30c; lb. 50c.**

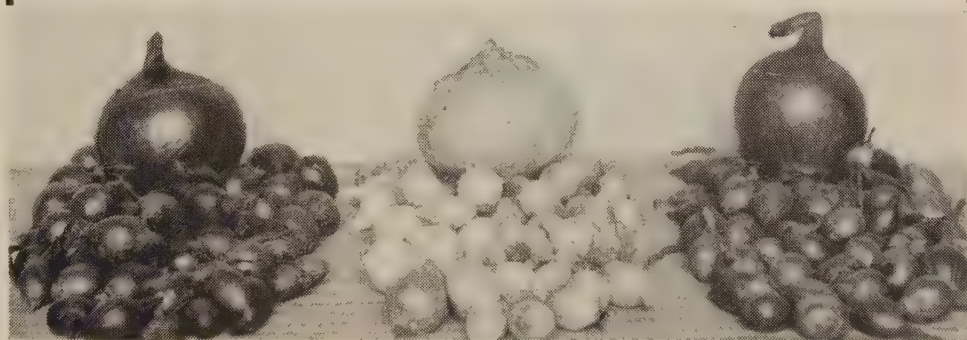
Morse's Progress No. 9 (Wilt Resistant). Early and a selection of Laxton's Progress developed by Ferry-Morse and considered an improvement over the original strain. Vines very similar to Laxton's Progress but a trifle larger and more thrifty. Pods are slightly larger in both length and width and darker green. We recommend this variety where a large podded, early dwarf variety is wanted. Definitely resistant to Fusarium Wilt. **Pkt. 10c; ½ lb. 30c; lb. 50c.**

Morse's Market (Wilt Resistant). A mid-season variety. A new variety of fine quality. Slightly earlier than most mid-season varieties. Outstanding because of its ability to produce heavy and consistent crops of fine clean large pods. Fully resistant to Fusarium Wilt and has some resistance to Mosaic. Resistant to some extent from aphid attack. Vines three feet tall, sturdy and vigorous. Pods very large, frequently 5½ inches long, pointed, slightly curved, medium dark green and usually contain 9 to 11 peas of excellent quality. **Pkt. 10c; ½ lb. 30c; lb. 50c.**

ONION SETS

For the earliest green onions use onion sets, planting them about 2 inches apart in the row. Dry onions can be grown from sets, but it will

be found much less expensive if grown from seed. We can furnish Yellow Danvers sets at 40c per quart postpaid.



MONARCH CARRIES EVERYTHING FOR THE GARDEN

HOW? WHEN? WHERE? WHY?

Transplanting

DON'T assume that transplanting is worth doing for itself alone. Transplanting is like an operation to a human being: the plant must recover from post-operative shock before it can take hold and start growing again. The only value in transplanting is that it allows you to use larger plants—important in short seasons. If there is ever any question as to whether to direct-seed or to transplant, always direct-seed unless quicker maturity is a factor. Even tomatoes, the crop most often transplanted, will usually produce as quickly from seed sown in the open as they will from transplants, which must grow new roots before they can begin growing again.

DO use good seedlings if you must transplant. They should be medium green in color, not too tall, and the leaves should be free from spots or dead areas. Avoid seedlings that are reddened or purplish in color, or show signs of yellowing (except in the case of celery plants, which can be quite yellow and still be good).

If you want to grow your own transplants to get healthy stock, follow these directions:

DON'T BEGIN too soon, unless you have a greenhouse or light hotbed and can give the seedlings plenty of room. For most vegetables, 6 to 7 weeks is time enough to allow between seeding and transplanting. Most homes are too dark, so don't try to grow seedlings unless you can do it in a sunny window that gets direct sunshine for at least six hours. Fill shallow boxes (flats) with a mixture of $\frac{1}{3}$ good garden soil, $\frac{1}{3}$ clean sand and $\frac{1}{3}$ compost, leaf mould or other well-rotted organic matter. Make very shallow rows or furrows with the edge of a ruler or a wood lath, 3" apart. Sow seeds in these rows 1" apart in the row. For most plants, a temperature of 70 degrees is a good compromise.

DON'T let your soil dry out, and don't let it be soggy. Spray *lightly* two or three times a day, using an atomizer or bulb sprinkler. When the best seedlings can be selected, thin out to stand 2" to 3" apart. Before transplanting into the garden, withhold water for 2 or 3 days. In transplanting, set the plants firmly by pressing on both sides of the stem with forefinger and thumb. If not firmed thoroughly, seedling may be killed by being hung with an air space underneath.

Always try to save as many leaves and roots as possible. Scientific tests show that it is better to allow the transplant to wilt slightly than to remove leaves to prevent that wilting. Removing leaves slows up manufacture of plant food that will help plant recover. Liberal watering should prevent wilting.

After Transplanting

As soon as the garden has been planted, water thoroughly but gently with a fine spray. This, by

the way, is the only time we *sprinkle* a garden; once the plants are established, any watering should give the soil a good soaking. If a crust forms after watering, break this by working with a hoe or cultivator on both sides of the row.

In the case of slow-germinating seeds like carrots and parsnips, mixing a few radish seeds in the packet will mark the row early. Otherwise you may have to delay cultivation until too late to do a good job of weed control.

DON'T take it for granted that cultivation will substitute for watering. Tests prove that pulverized soil loses just as much water after working as before. The real reason for cultivating is to destroy weeds. Weeds shade desirable plants, rob them of moisture and use up soil plant food.

Annual weeds are usually easy to kill if we can keep them from seeding. Deep-rooted perennial weeds, like bindweed and Canada thistle, are not so easy. The simplest way to control them is to take the land out of cultivation for a year and keep spraying with 2,4-D weed killer. If this isn't feasible, and if they must be controlled by cultivation, keep tops cut off every two weeks. Don't do this oftener, because otherwise the tops won't use up the stored food in the root. Don't do it less often, or the tops will manage to store new food.

Mulching Saves Work

Now that we know that a dust mulch allows just as much moisture to escape as bare, hard ground, cultivation should only be done to control weeds. A mulch, on the other hand, does what cultivation is supposed to do—it cuts down water loss from the surface and it also controls weeds. Any clean vegetable matter such as lawn clippings, chopped or whole straw or hay, ground corn cobs, peat, etc., can be used. Vermiculite, a mineral product used as house insulation and as poultry litter, has proved a valuable mulch because of its high water-holding capacity and insulating value.

Apply these mulches when the soil is still moist. If applied after the soil dries out, they fail to function. Remember—a mulch does not stop the use of water by the plants—it merely checks surface evaporation and keeps down weeds.



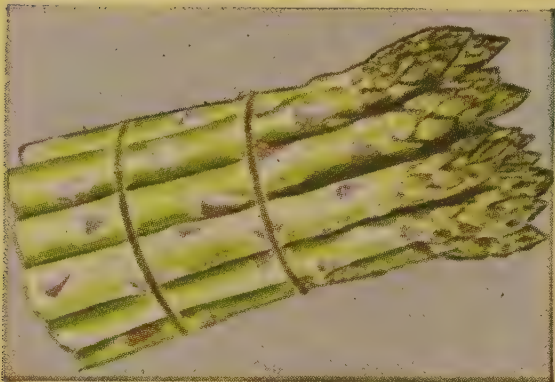
RADISH, Early Scarlet Globe



TURNIP, Purple-Top White Globe



CABBAGE, Early Jersey Wakefield



ASPARAGUS, Mary Washington



SQUASH, Zucchini

VEGETABLE SEED CULTURE

There's no end to the science of vegetable gardening—nor to the books that have been written about this fascinating subject. But if you haven't the time to read all the books, then try the brief paragraphs that follow. Here are the fundamental facts—the things every vegetable gardener should know—AND DO!

ASPARAGUS

Soak seed 24 hrs. before planting. Sow in loose, rich, moist soil after danger from frost is past. Thin to stand 6" apart. In early spring, set in permanent position, 24" apart, in rows 36" apart. Set in hole so that crown is 8" below surface, but only cover tips with 3" of soil. As plants grow, fill in until level. Don't cut first year after setting.

SNAP BEANS

Don't plant until danger from frost is over.

Sow beans in bottom of 3" to 4" furrow, 18" between rows, but do not fill in with more than 1" of soil over seeds. Thin to stand 4" to 6" apart in row. Bean seedlings are likely to break their necks pushing through heavy soil. In such soils, cover seeds with mixture of half sand and half soil, or sand and peat or any other loose, light material that will allow seedlings to break through easily.

Make successive sowings every 2-3 weeks until 60 days before frost. Don't cultivate beans when wet; this may spread disease.

BUSH LIMA BEANS

Plant two weeks later than bush snap beans, when soil is warm. Space rows 24" apart; otherwise follow instructions for snap beans.

POLE BEANS and POLE LIMAS

Both these should be planted two weeks after bush beans. Rough poles set 3 feet apart should be used. Anchor well, as heavy beanvines blow over easily. Sometimes three poles set to form a tepee are used and several seeds planted around each tepee.

SPECIAL NOTE ON ALL BEANS.

—Two scientific facts about beans will help produce better crops. First, being legumes, they should be inoculated with special legume culture listed in supply section. This enables plants to manufacture own nitrogen from the air. Second, bud drop of the tiny flowers (even before they can be easily seen) cuts the early set of pods. By spraying with FRUITONE these buds are held on and the early crop increased as much as 100%.

BEETS

Each "seed" is a fruit with several true seeds. No matter how thinly beets are sown, they will need thinning. Plant as soon as ground can be worked in spring, thin gradually (use thinnings as greens) until roots stand 4" apart. Make three sowings, one early, one three weeks later and one 60 days before frost is expected.

BRUSSELS SPROUTS

Grow like late cabbage, but don't use until after heads have been frosted.

BROCCOLI

Start plants indoors 5 weeks before last frost. Set out 12" x 24". Broccoli heads must be harvested before they bloom: they are inedible after yellow flowers appear. Direct-seed for late crop 60 days before frost is expected.

Special Directions for Controlling Insects in Cauliflower, Broccoli and Brussels Sprouts

Use Rotenone dust or spray. It must hit insects directly, so drive them out of inner head by dusting or spraying with light dose of Rotenone. Allow plant to stand for 10 minutes, then go back over the same row with a heavy dose of Rotenone. By this time the worms will be out on the surface and are sure to be killed. Repeat every 10 days.

Ask us how to control root maggots that harm cabbage, Brussels sprouts, onions, radishes, and turnips—also how to guard against the carrot rust fly.

EARLY CABBAGE

Start plants inside (see Page 14). Set out 12" x 24" as soon as frost danger is past. Dusting with D.D.T. is safe if outer leaves are discarded, since plant grows from the inside out.

LATE CABBAGE

Direct-seed four months before frost is expected, thinning to 24" x 36". Or start plant indoors (see Page 14) 30 days before needed, transplanting outdoors 90 days before frost. Don't water freely when heads are nearly filled, as this promotes splitting; irrigate only enough to keep plants growing well.

CELERY

Start in hotbed 60 days before needed. In setting outdoors, don't get soil in or over crown. Set 7" to 12" apart. Soil must be rich, moist and loose. As soon as plants have grown to 14" to 15" tall, set 12" boards on both sides of row and hold in place with earth. Or 4" drain tile can be used to blanch individual stalks.

Celery must have warm, settled weather; if chilled, plants are likely to go to seed.

CHINESE CABBAGE

Must never be grown as a spring crop since it will only go to seed. Plant after June 15th, as days are getting shorter: then it will head. An excellent succession crop to follow early peas.

COLLARDS

Follow directions for early cabbage.

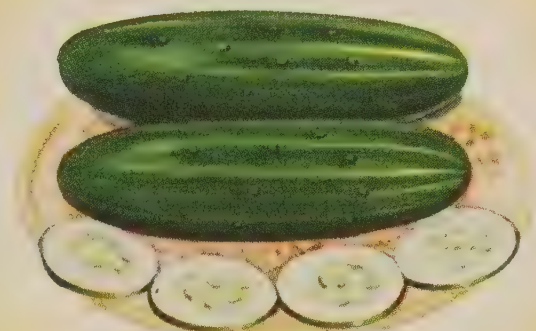
(Continued on Page 17)



BEANS, Improved Golden Wax



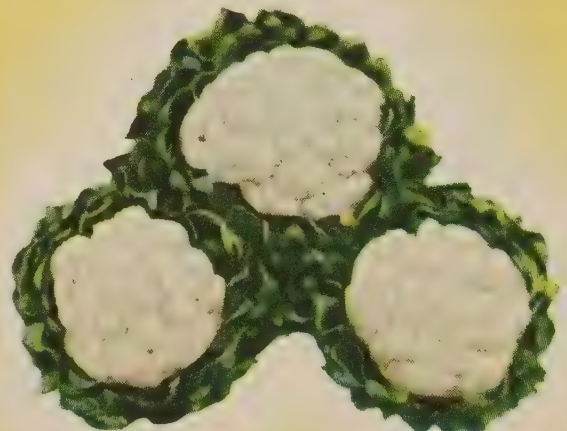
TOMATO, Stokesdale



CUCUMBER, Cubit



SQUASH, Early Prolific Straightneck



CAULIFLOWER, Early Snowball

Dwarf Telephone (Wilt Resistant). A mid-season variety. Very satisfactory for home, market garden and shipping. Vines 24 inches tall, thrifty; medium green. Pods light green; $4\frac{1}{4}$ inches long, $\frac{3}{4}$ inch wide; plump; tapered at end. Seeds large, wrinkled, green. Recently improved by the grower. **Pkt. 10c; $\frac{1}{2}$ lb. 30c; lb. 50c.**

PEPPERS

California Sweet Wonder. Matures in 72 days; large green fruits available practically as early as Ruby King. This is the standard of excellence in sweet peppers; much used, particularly by market gardeners and shippers. Plant thrifty, upright, heavily productive over a long season. Fruit handsome, very large, very smooth and regular, commonly $4\frac{1}{2}$ ins. long and $3\frac{1}{2}$ to 4 ins. through; deep green, becoming bright crimson; flesh extremely thick and firm, sweet throughout and of distinct flavor. **Pkt. 10c; oz. \$1.55. Postpaid.**

Long Red Cayenne. Matures in 70 days. A leading sort for use in pickling and for drying. Very pungent, fruits 5 inches long, $\frac{1}{2}$ inch thick, tapered. **Pkt. 10c; oz. \$1.35. Postpaid.**

PUMPKINS

CULTURE. Enormous pumpkins may be grown on the fertile soils of Southern Oregon and Northern California. Plant the seed in the open ground when it is well warmed and after danger from frost is past. Plant in hills about 8 feet apart; 3 to 4 pounds of seed will plant an acre and 8 ounces will plant 100 hills. Do not plant near squashes, as they are likely to mix.

Connecticut Field. The standard field pumpkin, grown for pies, canning and stock feed. Fruits very large, commonly 10 inches long, 12 inches in diameter and weigh 20 lbs., sometimes much larger; skin smooth, deep orange-yellow; shell thin, hard; flesh thick, coarse, sweet and deep yellow. **Pkt. 10c; oz. 30c; $\frac{1}{4}$ lb. 80c. Postpaid.**



CONNECTICUT FIELD PUMPKIN

New England or Sweet Sugar. A handsome and productive small pumpkin; skin orange, flesh yellow, fine grained, very sweet. This is the famous New England Pie Pumpkin. **Pkt. 10c oz. 30c; $\frac{1}{4}$ lb. 80c. Postpaid.**

PARSNIPS

Long Smooth or Hollow Crown. A standard table sort; the best and most productive for field culture. **Pkt. 10c; oz. 25c; $\frac{1}{4}$ lb. 65c. Postpaid.**

RADISHES

Crimson Giant. Matures in 29 days. Superior home and market garden sort. Tops medium small. Roots spherical to slightly top-shaped; deep crimson; the largest of the early turnip rooted radishes; commonly attain diameter of $1\frac{1}{2}$ excelled quality. **Pkt. 10c; oz. 20c; $\frac{1}{4}$ lb. 50c. Postpaid.**

Early Scarlet Turnip. Matures in 23 days. Very early sort, superior and equally valuable for out-of-door culture and for forcing. Tops small, ideal for bunching. Roots slightly elongated globe shape; $1\frac{1}{4}$ inches long when ideal for use; with slender well defined tap root; uniform rich bright scarlet; flesh white, crisp and of splendid quality. **Pkt. 10c; oz. 20c; $\frac{1}{4}$ lb. 50c. Postpaid.**

Early Scarlet Turnip (White Tipped). Matures in 25 days. Handsome, popular variety of outstanding quality; much used in home and market gardens. Tops small, roots deep turnip shape, almost globular, with slender tap root; bright scarlet with well defined white area about the tip; remain crisp and of splendid quality until $1\frac{1}{4}$ inches in diameter or greater. **Pkt. 10c; oz. 20c; $\frac{1}{4}$ lb. 50c. Postpaid.**

Long Scarlet. Matures in 26 days. Standard home and market garden sort. Tops small. Roots long, tapered; become 4-5 inches long and $\frac{3}{8}$ inch thick at shoulder; bright carmine red. **Pkt. 10c; oz. 20c; $\frac{1}{4}$ lb. 50c. Postpaid.**

Long White Icicle. Matures in 27 days. Decidedly the best early white variety and considered by many the standard of excellence in radish. Particularly popular in home and market gardens. Tops small, roots long, tapered; very white; brittle as ice; of splendid quality until 5 to 6 inches long; mild and of splendid flavor. **Pkt. 10c; oz. 20c; $\frac{1}{4}$ lb. 50c. Postpaid.**

RUTABAGAS

American Purple Top. One of the best and most popular varieties, with yellow flesh. Good for stock feeding. **Pkt. 10c; oz. 20c; $\frac{1}{4}$ lb. 50c. Postpaid.**

SPINACH

Bloomsdale Savoy. Matures in 40 days. The standard very early sort for home and market garden. Plants upright and compact, attain height of 10 to 12 inches and spread 12 to 15 inches. Leaves large; blistered and crumpled; rich deep, glossy green; of splendid quality. **Pkt. 10c; oz. 20c; $\frac{1}{4}$ lb. 45c.**

Giant Thick Leaved. Matures in 43 days. Decidedly the best of the round seeded thick leaved sorts. Because of the enormous yield, long standing character, and the deep green color and smooth character of the leaves, this is highly recommended for canning as well as for home and market garden. Leaves

very large, thick broad arrow-shaped with rounded tip. Easy to wash free of sediment. **Pkt. 10c; oz. 20c; $\frac{1}{4}$ lb. 45c. Postpaid.**

SALSIFY (Oyster Plant)

Mammoth Sandwich Island. Great improvement over the ordinary type, producing long smooth, thick roots of an even straight growth. Flesh almost white. **Pkt. 10c; oz. 90c.**

TOMATOES

Victor. Introduced by Michigan State College. All American Bronze Medal Winner. In season with Earliana but matures a larger proportion of its fruit during the first few weeks of picking. Vine is short branching and foliage rather sparse. Fruits about 3 inches in diameter, globe-shaped or slightly flattened, smooth, and ripen to full deep scarlet. Recommended as a first early market variety and for the home garden. **Pkt. 20c; oz. \$1.50, postpaid.**



BONNEY BEST TOMATOES

Bonney Best. One of the very best early varieties for table and canning. Very full flavored and slightly acid. Vine medium, not very heavy growing. Fruits medium sized, apple shaped, smooth; solid, bright scarlet in color and of exceptional quality. **Pkt. 10c; oz. \$1.25. Postpaid.**

Earliana (Special Market Gardener Strain). A first early sort, widely used for home gardens and by truckers. Ours is one of the several excellent strains of this important variety which has been bred for thicker, smoother fruits. Vine is open, spreading, medium small. Fruits flattened, medium sized, form, bright, red, quite smooth. **Pkt. 10c; oz. \$1.65. Postpaid.**

Chalk's Early Jewel. A second early sort for home gardeners and truckers, also good for canning. Plant medium, with open growth; prolific. Fruits medium large, smooth, scarlet, flattened globe-shaped. **Pkt. 10c; oz. \$1.65. Postpaid.**

Small Fruited Varieties

Yellow Pear. Pkt. 15c, postpaid.

Yellow Plum. Pkt. 15c, postpaid.

Husk Tomato or Ground Cherry. Small, round, yellow fruits about half an inch in diameter, enclosed in a thin husk. Very deliciously sweet. Excellent for preserves. **Pkt. 10c, postpaid.**

MONARCH CARRIES A COMPLETE LINE OF GARDEN TOOLS AND SPRAYERS

SQUASH

Improved Green Hubbard. Standard winter squash for home, market and shipping. Fruits medium large; commonly 9 to 10 inches through; globular, dark bronze green, moderately warted; rind very hard and strong; flesh very thick, deep orange-yellow, fine grained and dry; of splendid quality. **Pkt. 10c; oz. 35c; ¼ lb. 95c. Postpaid.**

Banana or Sweet Potato. An excellently flavored winter squash. Fruit commonly 18 to 24 inches long and about 7 inches in diameter. The skin is gray-blue and not so hard as that of the Hubbard, while the flesh is fine grained, deep yellow, dry, sweet and of prime quality. Good keeper. **Pkt. 10c; oz. 35c; ¼ lb. 95c. Postpaid.**

Table Queen or Des Moines. Very early; extremely prolific; one of the most popular for home and market garden and shipping. Fruits pointed acorn shape; 5½ inches long and 4 inches through;

uniformly ridged; skin smooth, dark green; shell thin; flesh light yellow, bakes dry and sweet. Vines yield prolifically and fruit matures in about 100 days. Fine for baking and serving in halves. **Pkt. 10c; oz. 30c; ¼ lb. 80c. Postpaid.**

Yellow Summer Straightneck. Well known. Fruit long, skin very much warted; bright golden yellow. **Pkt. 10c; oz. 30c; ¼ lb. 80c.**

White Bush Scallop. A very early variety with flat, white scalloped squashes 4 to 6 inches in diameter. Vine bushy in habit and dwarf. **Pkt. 10c; oz. 30c; ¼ lb. 80c.**

Zucchini (Italian Marrow). This is a new dark skinned type more desirable than former types. Matures in 65 days. Straight, almost cylindrical. Grows to a length of 18 inches and 4 inches in diameter. Fruits smooth, rich dark green with no striping or mottling. The favorite summer squash. **Pkt. 10c; oz. 30c; ¼ lb. 80c.**

TURNIPS

Purple Top Strap Leaf. Ready for the table in 45 days. Very important home and market garden sort. Tops small, erect, compact. Roots flat, become 5 inches in diameter and half as thick; purplish red above and white below; flesh clear white, fine grained, mild. **Pkt. 10c; oz. 20c; ¼ lb. 50c. Postpaid.**

Purple Top White Globe. Matures to table size in 55 days. Full size in 70 days. The standard home, market garden and shipping sort for table use. Tops medium large, compact, strap leaved. Roots globular, smooth; bright purplish-red above, white below; become 5 to 6 inches in diameter; flesh white, firm; fine grained and tender when young. **Pkt. 10c; oz. 20c; ¼ lb. 50c. Postpaid.**

White Egg. Ready for the table in 55 days. Tops erect, fairly compact; cut-leaved. Roots white, smooth, grown one-half above ground, egg shaped, 3 inches long; flesh white, firm grained, sweet and tender. **Pkt. 10c; oz. 20c; ¼ lb. 50c. Postpaid.**

HOW? WHEN? WHERE? WHY?

(Continued from Page 15)

SWEET CORN

For the home gardener, the simplest way to plant sweet corn is in rows or drills, not in hills. Space the rows 36" apart, and plant a seed about every 3". Thin stalks to stand 12" apart in row. The drill should be 3" to 4" deep, but don't cover seed with more than 1" of soil. The drill or furrow can be filled in as the plants grow to anchor them against wind.

Removing suckers has been standard practice with practically all growers. Now, experiments prove that removing suckers merely takes away extra food-producing leaves and so hurts rather than helps growth. Also, suckering often disturbs roots enough to injure plant.

Always plant corn in several short rows side by side rather than one long row. Corn is pollinated by wind and rows side-by-side mean that all the stalks can be reached by the pollen. Many home gardeners, on reading newspaper accounts of corn de-tasseling assume that this is necessary to set ears. On the contrary removing tassels may cut the crop seriously. Detasseling is *only* done where hybrid corn is raised for seed purposes. The more pollen that flies, the better the set of kernels. So *don't* detassel sweet corn in the home garden.

If weeds are under control, stop cultivating. If weeds are bad late in the season, work the soil as shallow as possible to avoid injuring surface feeder roots.

CUCUMBERS

Sandy soils with plenty of compost are best. Roots have difficulty on heavy soils. Plant 8 to 10 seeds in a hill (see Page 11—A HILL IS A HOLE). When vine is 6" long, thin to three strongest plants. Keep fruits picked to promote continuous fruiting. If compost isn't available, feed with commercial fertilizers. Use plenty of moisture: cucumbers are 90% water.

EGGPLANT

Start seed indoors 8 weeks before plants are needed. Set out after apple blossoms have fallen and weather is warm and settled. Feed and water liberally as Eggplant needs to be kept growing rapidly to produce well. D.D.T. will control pests that until now made this a tricky crop to grow.

ENDIVE

Strictly a cool-weather crop: gets bitter at temperatures much above 80°. Plant very early and again in mid-July. Use last planting as late fall salad crop, and store surplus in cold frame or cellar by digging each plant with ball of soil. Space 12" apart in rows 18" apart. Feed liberally for bigger, crisper heads.

KALE

Grow like Brussels Sprouts.

KOHLRABI

Wants rich soil. Plant early in spring 4" apart in row. Must be used when young: woody when old. Make second planting 3 weeks later, and again after mid-July.

MUSKMELON

Plant 8 to 10 seeds to a hill (see above—A HILL IS A HOLE) after weather is warm. If grown in cool weather will not bear well and melons will have poor flavor. Melons love plenty of compost or well-rotted manure. When vines begin to run, thin to 3 plants to a hill. On heavy soil, Bender's Surprise or Hearts of Gold do better than others. In damp soil mulch with clean straw or raise each fruit on a shingle to keep from rotting.

OKRA

Plant on rich soil when weather is hot and settled, spaced 12" x 24". Pods mature rapidly and must be picked or they will be inedible.

ONIONS

Sets produce sooner than seeds. Set 1" apart and pull every other set for

Practical answers to every-day questions about home gardening

use as green onions. Again pull every other onion, leaving balance of sets to mature as dry onions.

From seed, onions have better flavor. Green onions can be grown in about 60 days from seed. Use thinnings for green onions, leaving 4" apart for globe types and 6" for the big Spanish types to mature for dry onions. Latter can also be started indoors for largest bulbs and can be set out 6" apart after frost danger has passed. All onions need liberal feeding and watering.

PARSLEY

Seed germinates slowly; soak over night. Sow early as seed germinates poorly in hot weather. Space plants 8" apart. Plain parsley has best true parsley flavor: curly sorts better for garnishing. If leaves are cut off when plant is 4" tall, curly sorts will have better curl.

PARSNIPS

Must be planted as early as ground can be worked. Soil must be loose to a depth of 12" and cannot be heavy. Space 5" apart. Frost turns starches into sugar and improves flavor. Roots are hardy: leave in ground over winter if desired.

PEAS

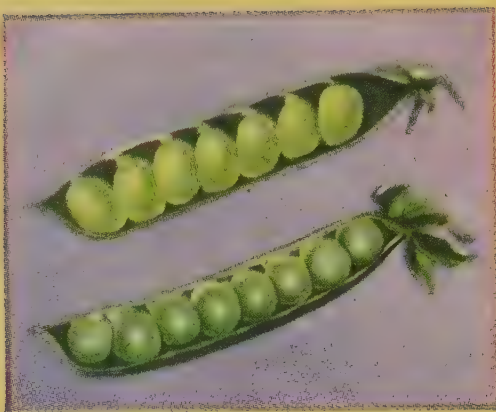
Plant variety Alaska as soon as ground can be dug. Plant wrinkled varieties (which have better flavor) when narcissus buds show color or when crocuses are in bloom. Peas are not satisfactory when weather turns hot. Tall varieties must be staked. Most home gardeners prefer dwarf varieties like Little Marvel. Peas want well-limed soil. Don't forget, inoculation improves production.

PEPPERS

Need long growing season: start indoors 8 weeks before plants are wanted. Set out after petals on apple blossoms have fallen. Set plants 15" x 24" and feed liberally for bigger fruits.

PUMPKINS

Follow muskmelon culture, or plant in corn after last cultivation.



PEAS, Little Marvel (top)
Laxton's Progress (bottom)



PEPPER, California Wonder Improved



BEANS, Bountiful



TOMATO, Marglobe



RADISHES, Icicle and French Breakfast



TOMATO, Rutgers

HOW? WHEN? WHERE? WHY?

(Continued from Page 17)

RADISHES

As a rule the first crop to mature: plant as early as soil can be dug. Feed liberally for quick growth. Sow a 10 foot row every ten days until weather turns warm. Start planting again with the coming of cool weather in fall. The fall and winter types are sown in mid-summer to mature in fall for storage.

SPINACH

Seed in fall (protect with straw) or in very early spring. Must mature before hot weather.

Spinach (New Zealand)

While this crop grows freely in hot weather, it will not germinate except when soil temperatures are below 70 degrees. Hence it should be sown with the half-hardy crops—those that are planted when the narcissi bloom. Plant in soil with plenty of organic matter, spacing the plants about 3 feet by 3 feet. Keep them cut back, since only the young growing tips are eaten and long, woody stems have little flavor. Many who have tried a mixture of half Swiss Chard and half New Zealand Spinach say that this is better than either vegetable alone.

SQUASH

Follow culture given for muskmelon for vine types. Grow bush types in rows, spaced 24" apart. Keep picked. Will bear all summer.

TURNIPS

Follow directions for radishes. Thinings can be cooked for greens.

TOMATOES

There are two schools of tomato culture—those who stake and those who don't. Reasons for and against are as follows:

FOR STAKING: While staked plants produce fewer fruits per plant, they produce *more* tomatoes for a given area. So if room is at a premium, it will pay to stake. Staked plants usually produce cleaner fruits and bear somewhat earlier.

AGAINST: Staking calls for much extra labor in staking, tying and pruning. The total production per plant is higher in unstaked and unpruned plants. If you have plenty of room, the saving in labor makes the unstaked method the best. All commercial canning crops of tomatoes are grown in this way. If the ground under the vines is covered with a mulch of clean straw, this will improve the quality of the fruits and will also keep weeds down and save moisture.

When staking, set plants 18" apart in the row, in rows 3 feet apart. Use a 7 foot stake, driven 1 foot into the ground. Tie plant to stake with soft twine or other plant tie. Habit of growth calls for a side shoot from the first point where a leaf joins the main stem, another side shoot from the second leaf joint, and a flower cluster from the third joint. This 2-1 pattern of growth is repeated up the entire

Practical answers to every-day questions about home gardening

stem. The staked plant is allowed to grow from the tip, and as it grows, the stem is tied to the stake. As the side shoots appear, these are pinched out or rubbed off, leaving the flower clusters to produce fruits. When training tomatoes to stakes, be sure to leave all possible foliage to hide the fruits from direct sunshine; otherwise they will sunscald.

Tomato diseases have been on the increase lately. For this reason, planting disease resistant varieties like Rutgers, Pritchard and Marglobe is good business. Planting outside when the weather is cold and wet encourages disease by favoring the growth of aphids, which multiply at lower temperatures than do their enemies. Aphids spread virus diseases. By delaying planting until the weather is really warm, much of this type of injury can be prevented. Dusting with Tomato Dust helps control fungus diseases.

Blossom end rot and cracking at the stem end are due to variation in water supply. Don't allow water in soil to fluctuate any more than you can help. Don't water freely for a time and then stop. If you start watering, keep it up at regular intervals. A heavy mulch of straw not only helps prevent violent fluctuations in water supply, but helps keep the fruit clean if the vines are not staked. When grown without staking, the vines will sprawl on the ground. This means they will need more room. Three feet between plants and four feet between rows will not be too much ground to use if you can spare the room.

WHEN TO SOW

by Nature's Calendar

Man-made seed catalogs and books usually give planting dates and directions on a calendar basis. We'd like to do this, too, but our experience has taught us that such arbitrary dates are dangerous. Weather variations from year to year are likely to make the most carefully compiled dates go wrong. That's why we suggest you follow natural planting dates, which take into account the variation from year to year. While they are not 100% infallible, they are far more accurate than the calendar.

FULLY HARDY CROPS

Sow as soon as you can work the ground in spring, or when the farmer is planting oats. In some years, crocuses, snowdrops and winter aconites may be in bloom, but if the soil is workable before they appear, don't wait—plant as soon as you can. Even if the soil freezes over the seed, the following vegetables will start growing when it thaws again: Brussels sprouts, Broccoli, early Cabbage, Cauliflower, Collards, Cress, Endive, Kale, Kohlrabi, Lettuce, Mustard, Onion sets, Parsley, Parsnips, Alaska Peas, Radishes, Salsify, Spinach and Turnips. All of these can be seeded in fall (just before the ground freezes for the winter) and should give fair results in spring. If they kill out in open winters, they can be readily reseeded.

HARDY CROPS

Plant these when earliest tulips and narcissi bloom, when maple trees flower and when forsythia shows signs of fading: Beets, wrinkled Peas, Swiss Chard Leek, New Zealand Spinach, Onion Seed, Spinach. Take a chance on an early planting of Sweet Corn.

TENDER CROPS

Plant when Darwin tulips, lilacs and apple trees are in full bloom: Bush Beans, Sweet Corn, Pumpkins, Summer and Winter Squash.

TROPICAL VEGETABLES

When the petals on apple blossoms fall, and when the late tall irises are in full bloom, plant the following: Lima Beans (bush and pole) Pole Snap Beans, Muskmelon, Okra and Watermelons. Now is the time to set out all greenhouse-grown plants of tender vegetables like Peppers, Eggplant and Tomatoes.

A sure way to defeat the rabbit pest

To shut out pests like rabbits, gophers and pheasants, a good fence will pay in the permanent garden where it would have been too costly for a temporary plot. An attractive fence can be made by stretching two-foot high close mesh and planting hedge shrubs on both sides. The wire will turn all pests that walk, and flying pheasants rarely fly over this type of hedge if it is closely planted. If a wire fence must be used because of space limitations, plan on covering it with some woody vine. Do not grow tender vines like sweet peas on a wire fence because the hot sun will heat up the wire enough to stunt the growth of pea vine tendrils.

PLANTING BY THE MOON

Many gardeners like to govern their planting by the phases of the moon. For them, we show here all the necessary information generally shown by more voluminous

arrangements. As seedsmen, we cannot vouch for the effectiveness of this method, but we are glad to provide this complete and up-to-date chart for those who want it.

Signs of the Zodiac and Their Influence

♈ ARIES: Tends to dryness, barrenness. Fairly good for cultivating, spraying and weeding.

♉ TAURUS: Fairly productive. A good sign for planting root crops particularly potatoes and bulbous plants.

♊ GEMINI: Dry and barren. Not good for any kind of planting or transplanting. Kill noxious growths.

♋ CANCER: Moist, very fruitful, most productive of the Zodiac. Planting and transplanting should yield good crops. Irrigate, bud, graft, transplant.

♌ LEO: Most dry and barren sign. Use only to kill weeds, destroy roots, etc.

♍ VIRGO: Moist but barren. Not recommended for planting or transplanting; good for cultivating and destroying.

♎ LIBRA: Fairly fruitful. Seed for hay, corn, fodder, etc. Produces vigorous pulp growth, reasonable amount of grain. Good for flowers.

♏ SCORPIO: Next to Cancer in productiveness. Irrigate but do not dig potatoes.

♐ SAGITTARIUS: Generally considered barren but used by many for onions, seeding for hay, destroying weeds, etc.

♑ CAPRICORN: Earthly, fairly productive. Similar to Taurus but drier. Bulbous flowers, potatoes, tubers, root crops.

♒ AQUARIUS: Somewhat barren. Good only for cultivation and extermination of pests.

♓ PISCES: Similar to Cancer so use for same purposes. Very productive. Do not dig potatoes.

When to Plant

The table below shows when the moon enters each sign of the Zodiac. It also shows the moon's changes.

Under each month, we show first the time at which the moon enters each SIGN (day of the month and hour of the day, Central Standard Time). Then we show the moon CHANGES (day and hour) for each month.

● 1st QUARTER, MOON INCREASING—During 1st Quarter of Moon plant the following: Asparagus, Broccoli, Brussels Sprouts, Cab-

bage, Cauliflower, Celery, Corn, Cucumbers, Endive, Kohlrabi, Leeks, Lettuce, Spinach, Barley, Oats, Rye, Wheat.

) 2nd QUARTER, MOON INCREASING—During 2nd Quarter of Moon plant the following: Beans, Egg Plant, Melons, Peas, Peppers, Pumpkins, Squash, Tomatoes, flowers, and cereals.

When possible, plant seed while the Moon is in the fruitful signs of Cancer, Scorpio or Pisces. The next

best signs are Taurus, Libra and Capricorn.

☾ 3rd QUARTER, MOON DECREASING—During 3rd Quarter of Moon plant the following: Beets, Carrots, Chicory, Parsnips, Potatoes, Radishes, Rutabagas, Onions, Turnips, Tubers.

☾ 4th QUARTER, MOON DECREASING—In 4th or Last Quarter of the Moon turn sod, pull weeds, and destroy noxious growths, especially when Moon is in barren signs, Gemini, Leo, Virgo or Aquarius.

1948 — Moon's Phases and Positions — 1948

JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
2 ≈ 8:15a.	3 ♀ 4:31a.	1 ♀ 11:45a.	2 ≈ 5:20p.	2 ♀ 1:43p.	1 ♀ 9:53a.
4 ♀ 1:53p.	5 ♀ 3:31p.	3 ♀ 9:52p.	5 ♀ 5:54a.	5 ♀ 1:26a.	3 ♀ 7:44p.
6 ♀ 10:42p.	8 ≈ 4:00a.	6 ≈ 10:14a.	7 ♀ 5:29p.	7 ♀ 10:44a.	6 ♀ 2:02a.
9 ♀ 9:43a.	10 ♀ 4:37p.	8 ♀ 10:53p.	10 ♀ 2:56a.	9 ♀ 5:19p.	8 ♀ 5:26a.
11 ≈ 9:55p.	13 ♀ 4:36a.	11 ♀ 10:32a.	12 ♀ 10:17a.	11 ♀ 9:37p.	10 ♀ 7:11a.
14 ♀ 10:35a.	15 ♀ 3:07p.	13 ♀ 8:39p.	14 ♀ 3:43p.	14 ♀ 0:38a.	12 ♀ 8:49a.
16 ♀ 10:42p.	17 ♀ 10:53p.	16 ♀ 4:41a.	16 ♀ 7:16p.	16 ♀ 3:15a.	14 ≈ 11:35a.
19 ♀ 8:38a.	20 ♀ 3:04a.	18 ♀ 10:10a.	18 ♀ 9:31p.	18 ≈ 6:08a.	16 ♀ 4:03p.
21 ♀ 2:58p.	22 ♀ 4:03a.	20 ♀ 0:56p.	20 ≈ 11:17p.	20 ♀ 9:58a.	18 ♀ 10:31p.
23 ♀ 5:22p.	24 ♀ 3:23a.	22 ♀ 1:42p.	23 ♀ 1:53a.	22 ♀ 3:23p.	21 ♀ 6:53a.
25 ♀ 4:59p.	26 ≈ 3:09a.	24 ≈ 2:00p.	25 ♀ 6:36a.	24 ♀ 11:10p.	23 ≈ 5:15p.
27 ♀ 3:56p.	28 ♀ 5:30a.	26 ♀ 3:52p.	27 ♀ 2:23p.	27 ≈ 9:33a.	26 ♀ 5:24a.
29 ≈ 4:31p.		28 ♀ 8:48p.	30 ≈ 1:17a.	29 ♀ 9:46p.	28 ♀ 5:56p.
31 ♀ 8:30p.		31 ♀ 5:38a.			
Changes	Changes	Changes	Changes	Changes	Changes
☾ 3 5:13a.	☾ 1 6:31p.	☾ 2 10:35a.	☾ 1 4:25a.	☾ 8 8:30p.	☾ 7 6:55a.
● 11 1:44a.	● 9 9:02p.	● 10 3:15p.	● 9 7:16a.	☾ 15 6:55p.	☾ 13 11:40p.
☾ 19 5:32a.	☾ 17 7:55p.	☾ 18 6:27a.	☾ 16 1:42p.	☾ 22 6:37p.	☾ 21 6:54a.
☾ 26 1:11a.	☾ 24 11:16a.	☾ 24 9:10p.	☾ 23 7:28a.	☾ 30 4:43p.	☾ 29 9:23a.
JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
1 ♀ 4:39a.	2 ♀ 1:20a.	2 ♀ 0:21p.	1 ≈ 10:30p.	2 ♀ 0:11p.	2 ♀ 3:16a.
3 ♀ 11:48a.	4 ♀ 2:14a.	4 ≈ 11:36a.	3 ♀ 10:58p.	4 ♀ 5:39p.	4 ≈ 11:31a.
5 ♀ 3:06p.	6 ♀ 1:33a.	6 ♀ 0:34p.	6 ♀ 1:55a.	7 ≈ 2:41a.	6 ♀ 10:45p.
7 ♀ 3:54p.	8 ≈ 1:30a.	8 ♀ 4:51p.	8 ♀ 8:30a.	9 ♀ 2:33p.	9 ♀ 11:29a.
9 ♀ 4:04p.	10 ♀ 3:56a.	11 ♀ 0:56a.	10 ≈ 6:42p.	12 ♀ 3:12a.	11 ♀ 11:09p.
11 ≈ 5:31p.	12 ♀ 9:49a.	13 ≈ 11:58a.	13 ♀ 7:03a.	14 ♀ 2:24p.	14 ♀ 7:44a.
13 ♀ 9:28p.	14 ♀ 6:51p.	16 ♀ 0:27a.	15 ♀ 7:36p.	16 ♀ 11:02p.	16 ♀ 1:01p.
16 ♀ 4:11a.	17 ≈ 6:02a.	18 ♀ 1:01p.	18 ♀ 6:54a.	19 ♀ 5:11a.	18 ♀ 4:04p.
18 ♀ 1:13p.	19 ♀ 6:23p.	21 ♀ 0:45a.	20 ♀ 4:14p.	21 ♀ 9:32a.	20 ♀ 6:19p.
21 ≈ 0:03a.	22 ♀ 7:05a.	23 ♀ 10:40a.	22 ♀ 11:21p.	23 ♀ 0:48p.	22 ≈ 8:59p.
23 ♀ 0:12p.	24 ♀ 7:03p.	25 ♀ 5:45p.	25 ♀ 4:10a.	25 ≈ 3:33p.	25 ♀ 0:39a.
26 ♀ 0:57a.	27 ♀ 4:39a.	27 ♀ 9:35p.	27 ♀ 6:53a.	27 ♀ 6:19p.	27 ♀ 5:29a.
28 ♀ 0:33p.	29 ♀ 10:34a.	29 ♀ 10:41p.	29 ≈ 8:16a.	29 ♀ 9:52p.	29 ♀ 11:47a.
30 ♀ 9:01p.	31 ♀ 0:42p.		31 ♀ 9:32a.		31 ≈ 8:08p.
Changes	Changes	Changes	Changes	Changes	Changes
● 6 3:09p.	● 4 10:13p.	● 3 5:21a.	● 2 1:42p.	☾ 1 0:02a.	☾ 8 7:57a.
☾ 13 5:30a.	☾ 11 1:40p.	☾ 10 1:05a.	☾ 9 4:10p.	☾ 16 0:31p.	☾ 16 3:11a.
☾ 20 8:31p.	☾ 19 11:32a.	☾ 18 3:43a.	☾ 17 8:23p.	☾ 23 3:22p.	☾ 22 11:12p.
☾ 29 0:11a.	☾ 27 0:46p.	☾ 25 11:07p.	☾ 25 7:41a.	● 30 0:44p.	● 30 3:44a.



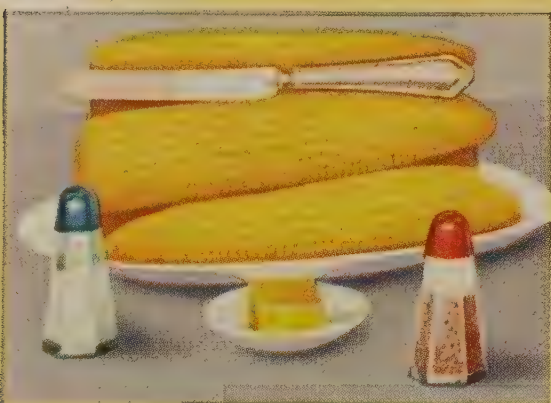
TOMATO, Pritchard (Scarlet Topper)



CARROTS, (top) Danvers Half Long, (center) Emperor, (below) Chantenay



SWISS CHARD, Lucullus



CORN, Golden Cross Bantam



20 LETTUCE, Black Seeded Simpson

Planting Guide

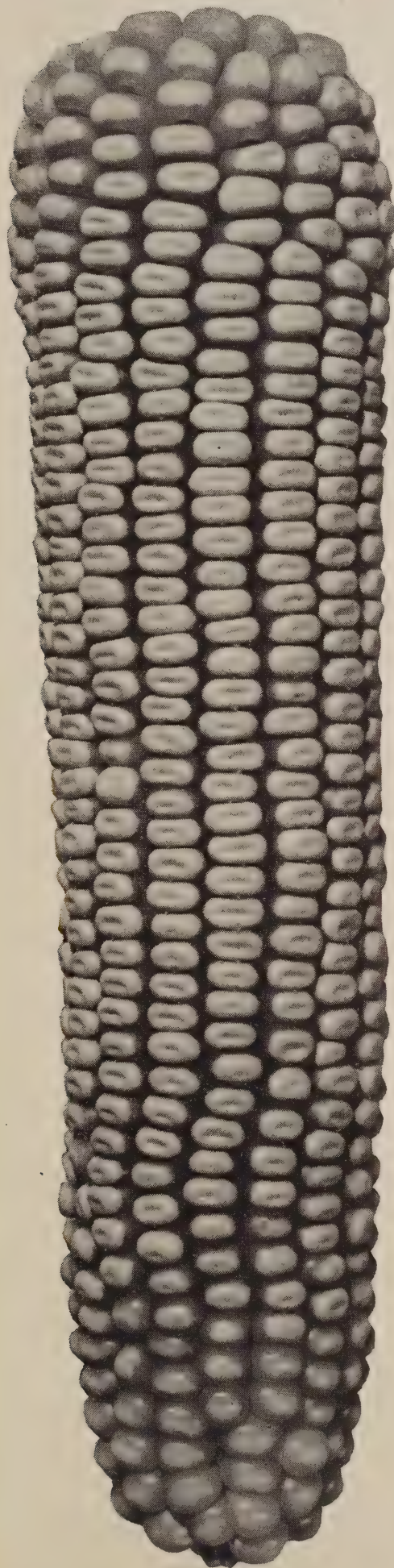
FOR VEGETABLE GARDENS

	Seed Required for 50 Ft. of Row	Distance Between Rows (Inches)	Distance Apart in Row (Inches)	Depth of Planting (Inches)	Approximate Yield per 50 Ft. of Row	Seed Required Family of 5
Artichoke	1/8 oz.	36 to 48	18 to 24	1/4		
Asparagus	1/2 oz.	14 to 24	3 to 6	1	25 lbs.	1/2 oz.
Beans, Bush	1/2 lb.	24 to 30	2 to 3	1 1/2 to 2	20 qts.	2 lbs.
Beans, Bush Lima	1/2 lb.	18 to 24	2 to 3	1	32 qts.	1 lb.
Beans, Pole	1/2 lb.	36 to 48	6 to 8	1 1/2 to 2	30 qts.	1 lb.
Beans, Pole Lima	1/4 lb.	36 to 48	6 to 8	1 1/2 to 2	1 1/4 bu.	1 lb.
Beets, Table	1/2 oz.	14 to 24	3 to 4	1/2 to 1	1 1/4 bu.	2 oz.
Beets, Mangel	1/2 oz.	20 to 28	3 to 4	1		
Broccoli, Heading	1/8 oz.	24 to 30	24	1/2	50 head	1 pkt.
Brussels Sprouts	1/8 oz.	24 to 30	12 to 18	1/2	15 qts.	1 pkt.
Cabbage	1/4 oz.	18 to 36	14 to 24	1/2	35 to 50 head	1/4 oz.
Chinese Cabbage	1/2 oz.	18 to 24	12 to 15	1/2	40 to 50 head	1 pkt.
Carrots	1/4 oz.	16 to 24	1 to 3	1/2	24 qts.	1/2 oz.
Cauliflower	1/4 oz.	24 to 30	20 to 24	1/2	25 to 30 head	1 pkt.
Celery	1/8 oz.	24 to 40	4 to 6	1/4	75 to 100 stalks	1 pkt.
Collards	1/4 oz.	24 to 30	14 to 18	1/2	3 bu.	1 pkt.
Corn, Sweet	4 oz.	30 to 42	9 to 12	1	100 ears	1 lb.
Corn, Pop	3 oz.	34 to 40	6 to 8	1		
Cucumber	1/2 oz.	48 to 60	12 to 36	1/2 to 3/4	75 to 100 fruit	1/2 oz.
Dill	1/4 oz.	18 to 36	4 to 8			
Egg Plant	1/8 oz.	24 to 36	18 to 24	1/2	70 to 80 fruit	1 pkt.
Endive	1/2 oz.	18 to 24	8 to 12	1/2	50 to 60 plants	1 pkt.
Kale	1/2 oz.	24 to 32	14 to 22	1/2	50 plants	1 pkt.
Kohlrabi	1/4 oz.	14 to 24	4 to 6	1/2	1 bu.	1 pkt.
Leek	1/4 oz.	12 to 42	2 to 4	3/4		1 pkt.
Lettuce	1/4 oz.	12 to 18	4 to 12	1/4	25 lbs.	2 oz.
Muskmelon	1/2 oz.	70 to 80	36 to 60	3/4	50 to 60 fruit	1 pkt.
Mustard	1/4 oz.	14 to 24	6 to 9	1/2	1 to 1 1/2 bu.	1/2 oz.
Okra	1 oz.	36 to 48	24	1	450 pods	1 pkt.
Onion	1/4 oz.	18 to 24	3 to 4	3/4	1 bu.	1/2 oz.
Onion (for sets)		12 to 14	not thinned	3/4	30 scallions	
Onion sets	1 pt.	12 to 18	2	1	60 bunches	1 qt.
Parsley	1/4 oz.	12 to 20	6 to 8	1/2	45 bunches	1 pkt.
Parsnips	1/2 oz.	18 to 24	3 to 4	1/2	1 bu.	1/2 oz.
Peas	3/4 lb.	24 to 36	1 to 2	1 to 2	30-50 qts. pods	3 lbs.
Peppers	1/8 oz.	20 to 30	18 to 20	1/2	25 doz. peppers	1 pkt.
Pumpkin	2 oz.	96 to 108	60 to 84	3/4	25 to 35 fruit	1 pkt.
Radish	1/2 oz.	12 to 18	1 to 2	1/2	50 bunches	3 oz.
Rhubarb	1/2 oz.	24 to 48	18 to 24			
Rutabaga	1/8 oz.	18 to 24	6	1/2 to 1		1 pkt.
Salsify	1/2 oz.	18 to 24	2 to 4	1/2		1 pkt.
Spinach	3/4 oz.	14 to 18	3 to 5	3/4	1 1/2 bu.	1 oz.
Spinach, N.Z.	1/2 oz.	30 to 36	12 to 18	1	35 to 50 lbs.	1 oz.
Squash, Summer	1/4 oz.	36 to 48	48 (4 seeds)	1	60 to 70 squash	1 pkt.
Squash, Winter	1/4 oz.	72 to 90	72 (4 seeds)	1	35 to 40 squash	1 pkt.
Swiss Chard	1/2 oz.	12 to 18	4 to 6	1	25 lbs.	1 oz.
Tomato	1/6 oz.	40 to 60	36 to 40	1/2	2 bu.	1 pkt.
Turnip (roots)	1/4 oz.	18 to 24	2 to 4	1/4	1 bu.	1/2 oz.
Turnip (greens)	1/2 oz.	12 to 18	2 to 4	1/4	1 1/2 bu.	1 oz.
Watermelon	1/2 oz.	72 to 96	72 to 96	3/4	20 fruit	1 pkt.

HYBRID FIELD CORN

We venture the guess that 99% of all corn planted in Southern Oregon is Hybrid corn. When first introduced Hybrid corn varieties were held as an experiment and many growers were reluctant to

do more than just try them out. Hybrid corn proved a sensation in our area right from the start. Heavier yielding, more drought resistant, more foliage, deeper root growth . . . all tended toward its popularity, almost instantly. Open-pollinated corn has been practically eliminated from the picture . . . **HYBRIDS ARE IT!**



No. 416

Idahybrid No. 416. A Proved Master Hybrid. Idahybrid No. 416 is still our favorite. We introduced it four years ago after Trials proved it adaptable to our section and No. 416 hasn't let us down. Proof of its high yielding ability is shown in the Oregon Extension Field Trials. It is a top producer. You are not experimenting when you plant Idahybrid No. 416. **Postpaid, per lb. 35c; 10 lbs. \$3.00.**

No. 544

Idahybrid No. 544. Is a top-yielding corn which matures just a trifle earlier than No. 416. As far as yield is concerned, there is very little difference. Our customers' experience with No. 544 leads us to conclude that it is probably better adapted to lighter soils than 416, although it does well on all types. As is the case with most all hybrids, No. 544 is ideal for silage, producing heavier yields of ensilage than open-pollinated sorts. **Postpaid, per lb. 35c, 10 lbs. \$3.00.**

No. 680

Idahybrid No. 680 Silage Corn. If you are after maximum yields for silage plant No. 680. It outyields all others in green growth and actual ears of grain. Does not lodge and is easily cut with binder. Grows to uniform height, resists cold, drought and heat. **Postpaid prices: Per lb. 35c; 10 lbs. \$3.00.**

WHY PLANT HYBRID CORN?

- ★ Stiff stalks—large roots—hold it straight in wind or hail—thus easier picking by hand or machine.
- ★ A vigorous grower under good or poor soil and weather conditions.
- ★ It yields 20 to 30 bushels MORE per acre.
- ★ Stalks stay' green after corn is ripe.
- ★ You can grow more and better corn on fewer acres.

**WRITE FOR
QUANTITY PRICES**

SEED POTATOES

Chippewa. There are more people bragging about their crop of Chippewa potatoes, they are so large, so flavorsome, free of disease, so many in the hill, easy to grow, delicious in flavor and a good cooker. Also a good keeper. An early sort, heavy yielding, white skin and flesh. Good size and shape. It is likewise highly resistant to mild Mosaic disease which destroys many varieties. **10 lbs. \$2.00, postpaid to 3rd zone.**

Early Bliss Triumph. The most popular pink potato. Very early. Tubers handsome appearing, being almost round with only slightly depressed eyes, mostly at the seed end. Run very uniform as to size and shape. Heavy cropper and good flavor. We offer only certified seed as a protection against mild Mosaic disease which often reduces yields 50%. **10 lbs. \$1.50, postpaid to 3rd zone.**

Irish Cobbler. One of the older and best known varieties and still popular is Irish Cobbler. White skin, white meat, good cooker, fine flavor. Yields are comparable to the best field varieties. Early sort. **10 lbs. \$1.50, postpaid to 3rd zone.**

Netted Gem. This is the most popular of the late potatoes. Known in some parts of the country as Russet, Buckskin, and Gem. This is the potato that made Idaho famous. Very mealy, good keeper, fine yielder, excellent flavor. **10 lbs. \$1.50, postpaid to 3rd zone.**



ASPARAGUS

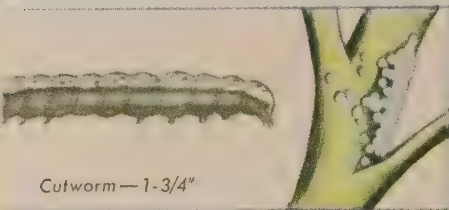
Mary Washington. Asparagus has become one of the most popular vegetables for home use and can very easily be grown. Once established, it will produce tender stalks for 8 to 10 years. We offer one-year plants of the new rust-resistant Mary Washington type. It has no peer. As a standard variety for home or market garden. **Doz. 75c; 100 plants \$5.00, postpaid.**

RHUBARB PLANTS

Riverside Giant Rhubarb. Has stood the test of time; crisp, tender, free from stringiness, delicious, distinctive flavor. The skin is so thin it disappears in cooking. Has every good characteristic a commercial rhubarb should possess. Yields of over 35 tons per acre are common. **Price: Each, postpaid, 45c.**

A Portrait Gallery of Garden Insects

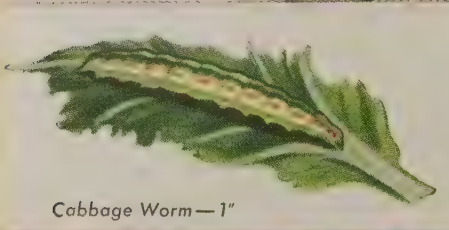
We are proud to present a series of true natural color portraits of common garden insects. USE THESE PICTURES to identify pests in your garden. Report them to us by name. We'll prescribe the right insecticides



Cutworm—1-3/4"



Tomato Hornworm—3" to 4"



Cabbage Worm—1"



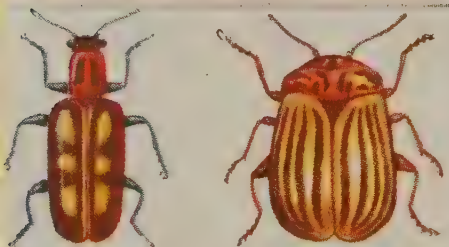
Giant Slug—4" or more



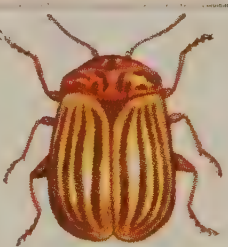
Japanese Beetle—1/2"



Mexican Bean Beetle—5/16"



Colorado Potato Beetle—7/32"



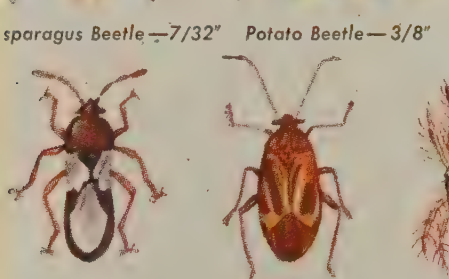
Potato Beetle—3/8"



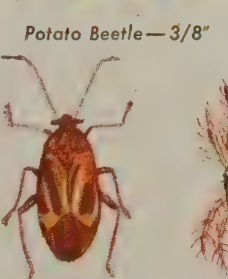
Potato Flea Beetle—1/16"



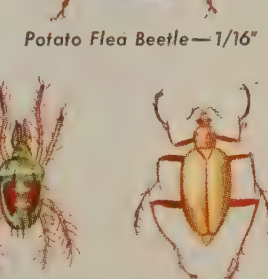
Bean Weevil—1/8"



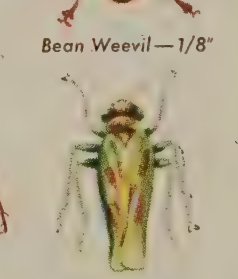
Chinch Bug—3/16"



Tarnished Plant Bug—1/4"

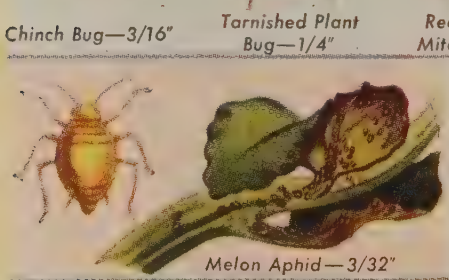


Red Spider Mite—1/60"

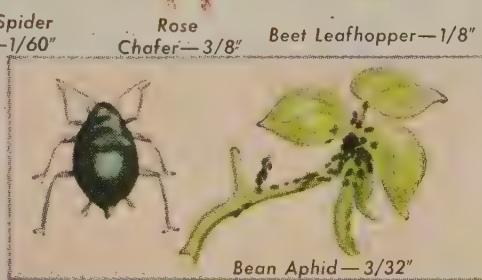


Rose Chafer—3/8"

Beet Leafhopper—1/8"



Melon Aphid—3/32"



Bean Aphid—3/32"



Squash Bug—5/8"



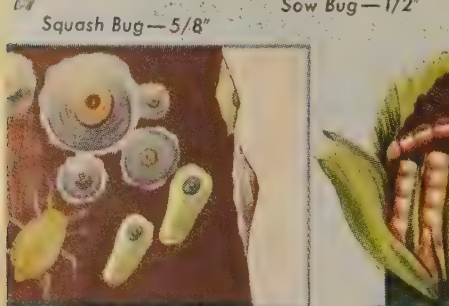
Sow Bug—1/2"



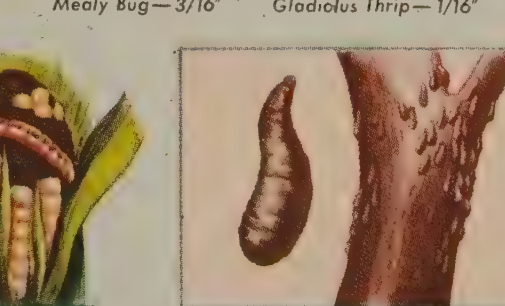
Mealy Bug—3/16"



Gladiolus Thrip—1/16"



San Jose Scale



Corn Earworm—2"

Oyster-shell Scale



**"TOGETHER
we can beat 'em!"**

Garden insects really aren't so tough—when you get to know them!

Once they are identified, there's almost always a quick way to defeat them.

That's why we have brought you this unique series of portraits of commonly encountered enemies of the garden. (We have pictured them in full, natural color, so that there may be no mistake in your identifications.)

If you'll just use these pictures as a reference guide—you can soon put a stop to the attack of these pests. We know, from long experience, just how to handle them. We know which insecticide is best for each situation—and we have it on hand, ready for you.

The new insecticides

The scientists have made great progress, during the last few years, in their battle against the bugs. They have made gardening easier than ever; they have insured better results.

We keep a very close watch on the new developments. We assay them very carefully. Hence, we know exactly which new formulas have proved themselves—and what they can do.

This practical knowledge is at your service, whenever you need it!

**REMEMBER —
FOR INSECTICIDES
ALWAYS
SEE THE SEEDSMAN!**

MISCELLANEOUS PLANTS

The Streamliner STRAWBERRY



We introduced this outstanding new variety three years ago and it has lived up to all the claims made by the originator. For real honest-to-goodness flavor Streamliner can't be beaten. It is an everbearing variety of heavy yielding propensities. Berries are deep red entirely through the fruit. Unlike many everbearing strawberries, Streamliner holds its size and flavor throughout the entire season and bears luscious fruit until frost. You'll marvel at its productiveness and flavor. Streamliner produces runners. Order early. **Postpaid prices: \$1.90 dozen; 25 plants \$3.00; 50 plants \$5.50; 100 plants \$9.50.**

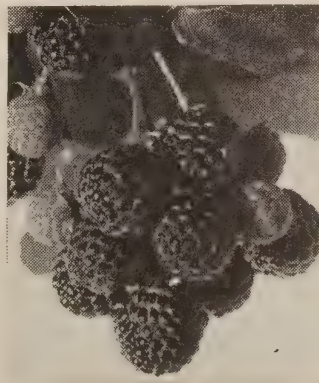
New Gem Strawberry. This is an exceptionally fine strain of runner-type strawberry; produces fine flavored fruit. An everbearer with very firm, excellently flavored fruit, of good size and very uniform. Unlike many white center everbearing types, Gem is red entirely through the fruit. Very hardy, easy to start, bears consistently and late. **Prices postpaid: 25 plants for \$1.75; 100 plants \$5.00. Write for quantity prices.**

Mastodon Strawberry. An old favorite. Heavy producer in the early season tapering off during the summer with a pick up in production in the Fall. Bright color outside but lighter interior. This has long been a favorite with many. However, Mastodon does not compare in quality with Streamliner although it still seems to be the choice of many folks. **Prices postpaid: 25 plants for \$1.75; 100 plants \$5.00.**

CANE BERRIES

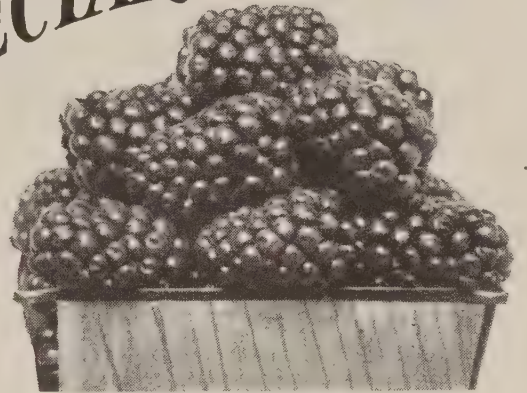
Indian Summer (Everbearing Red Raspberry). A new two-crop Red Raspberry developed by the New York Experiment Station. Bears in summer and again

in fall, continuing until frost. The berries are large, somewhat conical, of medium red color and high quality. Plants are hardy and vigorous growers. Indian Summer is a raspberry you should have in your garden. Surpasses any everbearing type introduced. We have eaten Indian Summer berries as late as November 15th, and they were delicious. **30c each, 10 for \$2.50.**



New Washington (Raspberry). A new raspberry which is gaining in popularity each year. Produces a very heavy

KING NECTARBERRY



We introduced this flavorsome berry in 1943. It has filled every claim we made for it. Nectarberries are of mammoth size with particularly large juice cells. The flavor is delicious, carrying the tang of Youngberry and the pleasing taste of Raspberry. Nectarberries begin to ripen about two weeks after the first Youngberries and vines will be completely loaded with ripe and partially ripe berries and bloom. They have less acid and are a dark wine color, almost black when ripe. Almost seedless. Hardy under both drouth and cold. Winters successfully in the colder states. Fine for jam or jellies and without peer as fresh fruit with cream. Our plants come to us from a dependable grower who has made the growing of berries his main endeavor. We guarantee strong, true-to-type plants in one year tips. **Postpaid prices: 1 to 5 plants 45c each; 6 to 10 plants 40c each; 10 to 50 plants, 35c each; 50 to 100 plants 30c each.**

crop of berries that are slightly larger than Cuthbert, firmer and brighter in color. New Washington is disease resistant, a strong grower, fine for home garden or for shipping. **Transplanted plants 25c each, 10 for \$2.00.**

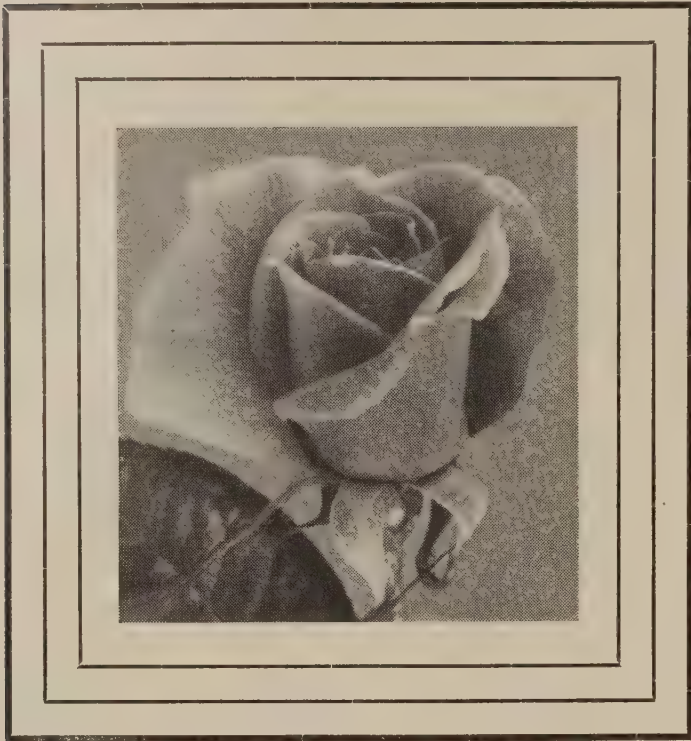
Cuthbert (Raspberry). This is the leading red raspberry. Strong and abundant bearer. Berries large, a beautiful deep crimson possessing a most pleasing flavor. Easy to pick and holds up well in shipping. Fine for home use or shipping. **Transplanted plants 20c each, 10 for \$1.75.**

Oregon Champion Gooseberries. Large, skin light green with flesh very sweet, juicy, excellent flavor. Very prolific bearer and will not mildew. **35c each, 10 for \$3.00. Heavy 2-year plants.**

Cherry Currants. The largest of all red currants; berries sometimes more than half-inch in diameter; bunches short; plant very vigorous and productive when grown on good soil and well cultivated. **50c each, 10 for \$4.50. Large, strong plants.**

ROSES

OUR ROSES ARE JUMBO SIZE NO. 1, TWO-YEAR OLD NORTHWEST GROWN OF HIGHEST QUALITY. PRICES QUOTED ARE F.O.B. MEDFORD. PLEASE ADD 10c PER BUSH TO COVER MAILING.



NOVELTY PATENTED ROSES

CHARLOTTE ARMSTRONG (HT) Plant Patent No. 455. A rose of surpassing beauty. Long slender, blood-red buds open to magnificent flowers of spectrum-red in cool weather and cerise in hot weather. Long stems. \$1.50 Ea.

PEACE. 1946 All-America Selection. Truly an outstanding rose and one of the finest ever introduced. The well shaped buds are canary yellow with cerise-picotee border, slowly opening to flowers of immense size and perfect form. The colors change as the flowers unfold . . . canary yellow, pale gold, creamy ivory and alabaster white, with cerise edging or petals passing through soft rose to apple blossom pink. \$2.00 Ea. (Plant Pat. No. 591).

GRAND DUCHESS CHARLOTTE. 1943 All-American Selection. The well formed buds of this beautiful rose are rich claret color, almost a brick red, which changes as the flower opens to a lovely begonia-rose. Perfect buds and flowers. Beautiful in every stage of development. Highly fragrant. \$1.50 Ea. (Pat. Applied for.)

MME. CHIANG KAI-SHEK. This All-America winner of 1944 marks it as far better than average for its class. The perfectly formed buds unfurl into a beautiful light clear canary yellow rose of perfect form, delightful perfume and vigorous growth. \$1.50 Ea. (Plant Pat. No. 664.)

MIRANDY. 1945 All-America Selection. A gorgeous, fragrant red rose. One of the best of the reds. Large ovoid buds, deep rich red with black shadings, opening to lovely chrysanthemum-red, velvety textured flowers of huge proportions. \$1.50 Ea. (Plant Pat. No. 632).

LOWELL THOMAS. All-America award in 1944. This is a new yellow rose of outstanding merit; its long buds are a rich glowing yellow, opening to a large flower of uniform lighter yellow. Long stems, mildly fragrant. \$1.50 Ea. (Plant Pat. No. 595.)

STANDARD BUSH ROSES

Prices \$1.19 ea.; \$13.80 Doz. Please Add Postage

RED HYBRID TEAS

CHRISTOPHER STONE. Velvety Scarlet Crimson. A vigorous upright grower. Very fragrant. Stands hot weather. Beautiful. See postage note at top of page.

ETOILE DE HOLLANDE. The finest dark red rose for general purpose. Ranked among the first three of its color by everyone who knows roses. The beautiful oval buds are perfect.

MARGARET MC GREY. A fine red rose with very attractive buds. Opens into a well formed flower. It's a Mc Grey which should recommend it to all. See postage note at top of page.

PINK HYBRID TEAS

DAINTY BESS. (Single) An exceedingly charming and dainty colored rose of perfect form. Petals are delicate shell pink and a favorite among those who love single roses.

PICTURE. Well shaped buds of medium sized, velvety rose-pink flowers, with warm salmon undertones. Strong, vigorous plants; unusually free blooming. One of the finest pink roses.

PINK DAWN. A beautiful new hybrid tea rose with glorious deep rose buds opening to lovely pink blooms tinted with orange at the base of petals. Sweetly fragrant, full double, and vigorous upright habit.

ORANGE & TRI-COLOR HYBRID TEAS

AUTUMN. A distinct color of intense richness. This rose incorporates shades of burnt orange suffused with russet-brown and bronzy red all over-laid on a background of rich yellow.

CONDESSA DE SASTAGO. You will admire the brilliant colors of this new double rose from sunny Spain. The bud is like a ball of gold with red stripes. Full open it is fiery copper and gold.

HINRICH GAEDE. This magnificent rose has beautiful long, pointed buds of a brilliant nasturtium-red color. The flowers are large, double, high-centered, and of a highly artistic shape.

PRES. HERBERT HOOVER. A wonderful multi-colored rose, charmingly combining shades of cerise-pink, flame, scarlet and yellow.

TALISMAN. A vividly colored rose of an unusual combination of gold, apricot, pink and carmine in mingled splashes, streaks and blends. See postage note at top of page.

YELLOW HYBRID TEAS

GOLDEN DAWN. The oval buds are rich straw-yellow, flushed old-rose, opening into splendid double, sweetly scented flowers of sunflower-yellow.

GOLDEN RAPTURE. A splendid new yellow rose of upright growth. The pure yellow buds are of ideal form. Beautiful, large, double flowers which last without fading.

MC GREY'S YELLOW. Large, bright buttercup-yellow flowers, every bloom of which is perfect in form and sweetly scented. The foliage is glossy and free of disease in most localities. The fine bush is full of vigor, continually sending out fine blooms. Stands heat well.

MRS. P. S. DU PONT. Winner of more gold medals for outdoor blooms than any other rose. Buds are small but exquisitely formed and of a reddish gold, opening into yellow flowers.

WHITE HYBRID TEAS

FRAU KARL DRUSCHKI. The most popular everblooming white rose. Outer petals of immense buds occasionally tinged with pink; open blooms pure snow white, large and moderately full.

MC GREY'S IVORY. The size and perfection of form of this wonderful rose are almost unbelievable. The buds are long and pointed, opening to perfectly formed flowers of ivory-white.

MME. JULES BOUCHE. Shapely buds and well formed, high centered flowers of pure white, occasionally with a tender blush pink tint at the center. A splendid white rose and a vigorous grower.

CLIMBING ROSES

CL. ETOILE DE HOLLANDE. Ranked among the first three of its color by everyone. The beautiful, oval buds are perfect of medium size and open into magnificent brilliant red blooms.

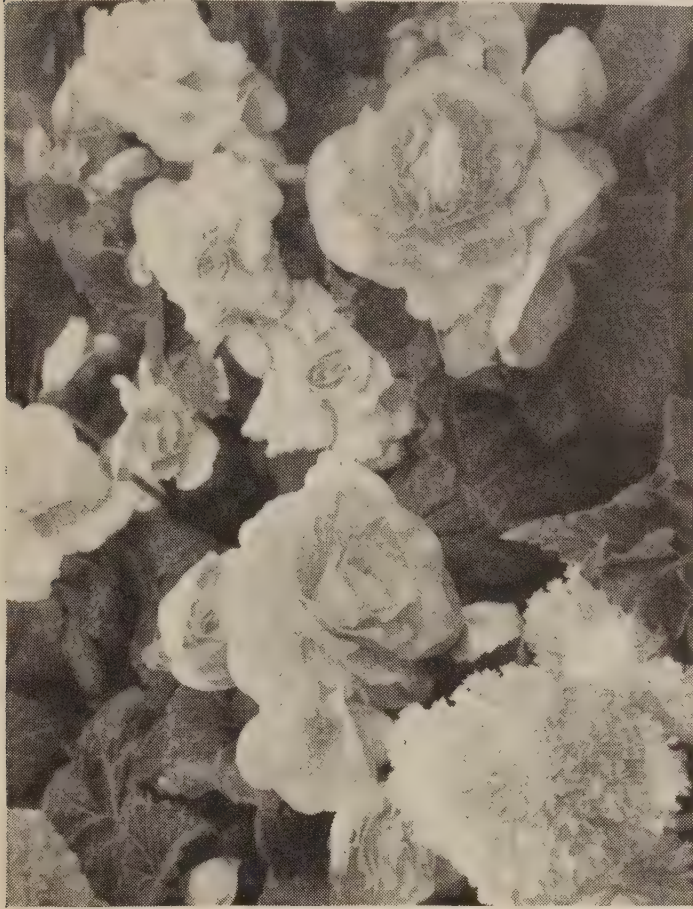
PAUL'S CARLET. The semi-double flowers are of good size and of a vivid scarlet-red color, fading but little. Freely produced in clusters on much branched canes. It is perfectly hardy and fine for trellis or arbor.

REVEIL DIJONNAIS. For sheer brilliancy of coloring this is probably one of the most outstanding climbers ever introduced. Large, semi-double flowers of light yellow with a deep zone of cerise-pink around the edges, creating the effect of a deep pink rose with a great yellow center.

TALISMAN. A striking climber with the same vivid colors as the bush variety. Flowers are fairly double; of lovely form. See postage note at top of page.

TUBEROUS BEGONIAS Highest Quality

Great care is exercised in the selection of our Begonia tubers. Only the strongest tubers are chosen for you . . . tubers that are sure to bloom profusely and produce for



you the largest, more robust plants and blossoms. Begonia tubers are available in February through May. Plant early indoors in pots or flats using leaf mold. When frost danger is over, move to the open garden. Protect from the hot sun and water regularly and often. Peat moss makes an ideal humus medium if you are unable to obtain leaf-mold. Order early. The demand is heavy. Delay might mean disappointment.

HANGING BASKET TYPE. Plant several tubers in an 8 or 10-inch hanging basket or pot. We suggest that you plant tubers in a mixture consisting of one-third each of well rotted manure, leaf mold or peat mull and sandy loam. Available in scarlet, rose and white.

DOUBLE CAMELLIA BEGONIA. Large full double flowers of exquisite form. For sheer beauty of form and color, Double Camellia Begonias have no equal. They are breathtaking. Available in white, yellow, salmon, apricot, orange-scarlet, salmon-rose and rose-pink. Be sure to indicate your color preference when ordering.

CARNATION TYPE BEGONIA. Include this variety in your collection. Flowers are lacinated and very much resemble a mammoth Carnation. Available in scarlet, rose, pink, salmon, yellow and white.

SINGLE FRILLED BEGONIA. Large single flowers with the petals profusely ruffled and frilled. Very beautiful form. Available in Orange, Salmon, Scarlet, White and the outstanding new variety; Fascination. Fascination is a beautiful flower. Its beauty will thrill you. Bright yellow stamens surrounded with a creamy-white field and bright pink ruffles make this a most outstanding blossom . . . one you will enjoy immeasurably.

A Hint on Garden Spading

The gardener who takes pride in doing a first class job should consider trenching or double digging his soil in the way the old-time European gardeners did. To double dig, remove a trench of soil just the width and the depth of a spade, and wheel this soil to the end of the garden where you plan to finish. Next, add a layer four or five inches deep of compost or manure to the bottom of the trench and dig it in. Then dig the soil from the next row and throw it on top of the soil you have just dug over. Repeat this process across the entire garden and you should have a loose, well-drained soil with a rich sub-soil. While this sounds unnecessarily complicated, actually it is quite simple and is worth the effort it costs. It is particularly valuable for root crops, and where heavy clay soils need to be broken up.

To lime or not to lime

Liming will help break up heavy clay and will sweeten acid soil. But don't use lime unless it is needed, since too much lime destroys humus. Use only when needed. We can supply a simple test kit that shows if lime is needed, and if so, how much. Litmus paper is not enough: it only shows a plus or minus reading.

COMMON LAWN WEEDS



So that you may more easily know them by name, here are the pests that cause most of your lawn troubles. For easy ways to combat them, refer to the Weed Killer section on a later page.

The finest FLOWER SEEDS in the world

AGERATUM, Floss Flower (a)

One of the most popular Summer blooming plants grown from seed, being literally covered with flowers from early Summer until frost. Excellent for borders, edgings, rockery, or pots. The taller varieties are fine for cutting. Do well in semi-shade. **AGERATUM MIDGET BLUE.** Silver Medal, All-America Selection, 1940. A very fine dwarf (2 to 3 inches high) Ageratum with delicate foliage, which is practically smothered with small true Ageratum Blue flowers. This is really the first dwarf Ageratum we have found that will come uniformly dwarf and true to color from seed. Pkt. 15c.

BLUE BALL. Compact round plants, 6 inches tall, hidden by a mass of pure blue flowers. Fine for dwarf beds and edging. Pkt. 10c.

ALYSSUM, Madwort

One of the most popular garden flowers, remaining in bloom the entire season; suitable for beds and edging in Summer, or for growing in pots and boxes for Winter blooming.

SNOW CLOTH. A very compact white Alyssum. Plants only about 3-in. tall. Rapidly becoming a favored variety. Pkt. 10c.

SAXATILE COMPACTUM. Perennial. Sometimes called Basket of Gold. It grows compactly and is covered with a wealth of golden blossoms in early spring. Height 12 inches. Pkt. 10c.

VIOLET QUEEN. Dwarf compact plants of small, sweetly scented flowers of a very rich deep shade of violet. Neat in habit and free flowering. Pkt. 15c.

ANCHUSA, Summer Forget-Me-Not (a)

A free-flowering class, producing its charming Forget-Me-Not-like blooms in graceful sprays from early Summer until late Fall.

BLUE BIRD. Deep blue flowers on plants 18 inches tall. Pkt. 15c.

ARCTOTIS HYBRIDS AUTUMN SHADES (a)

A gay and cheerful member of the colorful winter and spring blooming flowers. Dozens of blossoms open at a time, commencing to bloom in December or January. Many shades of red, orange, yellow, typical autumn tones. Foliage is a soft gray green with slender wavy edged leaves. A decided addition to the border garden.

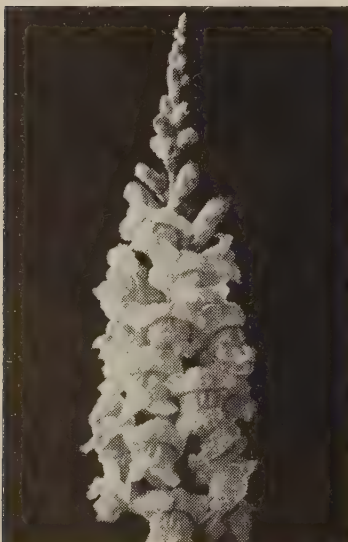
Mixed. Pkt. 15c.

ANTIRRHINUM, Snapdragon (a)

Snapdragons are fascinating flowers, with their interesting form and glowing colors. They are easy to grow and will bloom continuously until severe frost, making a wonderful display and supplying unlimited cut flowers. Ordinary good garden soil will produce fine Snapdragons either in full sun or semi-shaded spots. Sow outdoors when danger of frost has passed, or indoors six weeks earlier.

ROSALIE (Bronze Medal, All-America Selections, 1940). It is a rich deep rose with an underlying tone of topaz or amber, giving it a richness which makes it stand out among all other colors. The plants are base branching and produce from six to eight huge long flowering spikes on which the florets are decidedly well arranged. This is an all-purpose Snapdragon. Pkt. 15c.

SWING TIME. New rust resistant novelty. The loveliest rose pink imaginable with a bright yellow touch and a white tube



ANTIRRHINUM
Snapdragon



ANCHUSA
Bluebird

that is an addition to its beauty rather than a hindrance. Spikes are huge and evenly packed with immense blooms beautifully tapered. Pkt. 15c.

KEY TO SYMBOLS

The symbols after the name of each flower give you the following information:

- | | |
|--------------|--------------------------|
| (a) annual | (p) perennial |
| (c) climber | (rp) rockplant perennial |
| (b) biennial | (ra) rockplant annual |

Super Giants, Rust Resistant

30 to 36 inches tall.

APPLE BLOSSOM. Rosy pink, white tube. Pkt. 15c.

CRIMSON. Fiery crimson. Pkt. 15c.

FINEST MIXED. Pkt. 15c.

Large Flowered, Half Dwarf

Rust Resistant

Finest Mixed. Pkt. 15c.

AQUILEGIA, Columbine (p)

These are among the most beautiful of Spring and early Summer flowers; very effective when grown in the herbaceous border and groups among shrubbery. Graceful spurred flowers on stems 2 feet or more above the fern-like foliage.

LONG SPURRED BLUE SHADES, SPECIAL STRAIN. The finest strain in existence. The result of years of selecting. Huge flowers on plants from 3 to 4 feet high. This strain was bred and perfected by Waller-Franklin over a long period of years. Pkt. 25c.

MRS. SCOTT ELLIOTT'S IMPROVED STRAIN. One of the finest tall strains ever developed, long-spurred, large flowers, in a splendid mixture of colors. Pkt. 25c.

ASTER (a)

We can imagine no other flower which combines so much beauty with grace and usefulness and with which more brilliant effects can be achieved. From July until September this flower reigns supreme in the garden, not equaled by any other. For these obvious reasons we give a great deal of attention to these flowers, and are in a position to offer our patrons remarkably fine strains, producing perfect flowers of great beauty. To do well, Asters require a well pulverized soil, always kept open by continuous cultivation. Height, 1 to 3 feet.

PRINCESS ASTER, Wilt-resistant. A very attractive new cutting type of wilt-resistant aster, 2-2½ ft. tall, branching and free flowering, early blooming, bearing quantities of 3-3½ in. flowers on strong stems. Flowers have a full deep crested center, surrounded by several rows of dainty plume-like guard petals.

Princess Anne. Peach Blossom. Pkt. 15c.

Princess Bonnie. Soft salmon-rose. Pkt. 15c.

Princess Marsha. Rich cinnabar scarlet. Pkt. 15c.

IMPROVED GIANTS OF CALIFORNIA. This Aster bids fair to become a universal favorite. Characterized by the well-known Crego type of flower, combined with the Beauty Aster's long, non-lateral, branching stems, the California Giants, double type Aster, stands at the head of the list.

Finest Mixed. Pkt. 15c.

SUPER GIANT LOS ANGELES. Award of Merit, All-America Selections, 1934. The first introduction in modern Super Giant class, the flowers are fully double, 6 to 8 inches across, graceful and delicately interlaced. Long, stiff stems, bearing the large shell pink flowers smartly upright. Pkt. 15c.

ASTER, EARLY GIANT WILT-RESISTANT, LIGHT BLUE. Silver Medal, All-America Selections, 1939. Fully wilt-resistant, extremely large flowered and most attractive colors. Color is a rich light blue, a shade which blends in beautifully with either deeper or lighter tones. Pkt. 15c.

ASTER, EARLY GIANT WILT-RESISTANT, Peach Blossom. Very large and full with broad, graceful petals, daintily plumed and intertwined. Peach Blossom has particularly full-petaled flowers of an attractive shade which opens almost white and flushes light pink then lavender pink as flower matures. Plants 1½ to 2 feet tall. Pkt. 15c.

IMPROVED CREGO WILT-RESISTANT. The large shaggy flowers with long curled petals are not unlike the ostrich feather for which they are commonly named. The plants are strong, heavily branched and grow about 3 feet in height.

Crimson. Glowing deep rose-crimson. Pkt. 15c.

Purple. Showy violet purple. Pkt. 15c.

Rose. Lovely bright carmine rose. Pkt. 15c.

White. Purest white, large and fluffy. Pkt. 15c.

Crego's Finest Mixed. Pkt. 15c.

Continued on Page 28

ORDER EARLY, AVOID DELAY



HOW? WHEN? WHERE? WHY?

For better blooms from bulbs

GLADIOLUS

Perhaps the most useful of all summer-flowering bulbs. Excellent to fill in places where perennials have died, or where annuals have failed. When used in this way, need no care other than that given the other garden flowers. Do not use extra fertilizer; too much food promotes production of bulbils or offsets at the expense of good bloom and of a sound center bulb.

Gladiolus bulbs can be planted at any time from earliest spring until July first (if sound bulbs are on hand that late). Before planting, treat bulbs for thrips (ask for information). In light soil, plant 5" to 6" deep. This will help support the flower spike which might otherwise fall over. In heavy soil, 4" deep is correct. If planted too shallow, more bulbils will be produced, but not as good flowers. Space 6" apart in rows 24" apart, though for smaller, older sorts, 4" may be enough room to allow.

Regular spraying to control thrips is essential wherever this insect pest has been seen. If your flowers failed to develop properly last year, and if the leaves had greyish tan patches on them, this means you had thrips, and will have them again unless you treat. D.D.T. has proved a perfect control for this pest.

DAHLIAS

Perhaps our most spectacular fall flower, the Dahlia should not be planted too early, as the flowers will not do well in warm weather. Do not, however, keep tubers later than June 1st, since by that time they usually start shriveling and may be injured if kept later. Dahlias need plenty of potash and phosphorus. If you apply the 25 to 30 lbs. of mixed fertilizers recommended for general use before planting, then additional feeding of potash and phosphorus will still be needed to produce firm tubers that will keep over winter, healthier plants and better bloom.

Leaf hoppers which carry disease and which also injure the plant by sucking juice from the leaves and stems are easily controlled by regular dusting or spraying with D.D.T. Mulching with straw, excelsior or some other airy, light material will help keep the soil moist and cool. Don't use leaves or grass clippings that mat down and pack—they hold in too much moisture.

FANCY LEAVED CALADIUMS

These spectacular foliage plants are particularly valuable because they do well in shade. Start them in a mixture of half sand and half leaf mould at a temperature of over 70°. When the roots are well-developed and the shoot is beginning to show, pot up in rich soil. Set out in the garden when weather is warm and settled. Ele-

phant ears can be planted directly in soil out of doors, but the weather must be warm and settled, otherwise they will rot.

TUBEROSE

This warm-weather bulb should be planted in rich soil, with 2" of soil over the tip after the weather is warm and settled. Do not try to save the bulbs: these must be grown by a specialist if they are to bloom well. Buy new bulbs each year.

CANNAS

While cannas will tolerate cold soil, they usually do not start growing until hot weather comes. Plant when the apple blossoms appear, in rich soil. If planted in round beds, you will need 37 plants for a 10 foot bed (18 plants on the outside, 12 in the second row, six for the third row and one in the center). A 7 foot bed will use 19 plants, with 12 plants on the outside row, six for the middle row and one plant in the center.

LILIES

Even the swamp lilies will not tolerate wet feet; all must have perfect drainage. Yet they like a moist, cool soil. This means that liberal quantities of old well-decayed compost is almost essential for lilies. They will not tolerate lime; your soil should have a pH of 6.5 or below if you want to grow good lilies.

ASTERS, Continued



GYPHOPHILIA
Baby's Breath



COREOPSIS
Double Sunburst

AMERICAN BRANCHING. Wilt-Resistant. Plants 2½ to 3 feet tall, branching, robust; flowers large, double and fine form, blooming in early September. Our selected stocks of these are the best money can buy.

Finest Mixed. Pkt. 15c.

SINGLE ASTERS. (a) Large, daisy-like flowers in the same colors as the double China Asters, 18-24 inches high with large flowers on graceful stems. Fine for variety in the garden. Excellent for cutting. Mixed. All colors. Pkt. 15c.

BABY'S BREATH (See Gypsophila)

BACHELOR'S BUTTON (See Centaurea)

BALSAM, Lady Slipper (a)

An old and popular garden flower of easy culture. Gorgeous masses of brilliant colored double flowers are produced in the greatest profusion. Height, 2 feet.

CAMELLIA FLOWERED. Finest mixed. Pkt. 15c.

BEAN (a)

A rapid climber, flowering profusely; grows 10 to 15 feet high. Edible as well as ornamental.

SCARLET RUNNER. Pkt. 10c.

BLUE FERN FLOWER (See Nierembergia)

BRACHYCOME, Swan River Daisy (a)

Brilliant free-flowering annual blooming throughout the Summer months and suitable for beds or borders. The dainty flowers resemble small Cinerarias. Height, 6 to 12 inches.

Mixed Colors. Pkt. 25c.

CALLIOPSIS, Tickseed (a)

Very showy and splendid subjects for garden decoration as well as for cutting. Sow seed where intended to bloom in early Spring; thin out to 6 inches apart. Cut flowers as soon as they fade, as this prolongs the blooming season until Autumn. Height, ½ to 2½ feet.

GOLDEN CROWN. Silver Medal, All-America Selections 1938. An enlarged Drummondii. A rich orange-yellow or gold of pleasing fragrance. Makes a good cut flower with 12-inch wiry stems.

Tall Mixed. Pkt. 15c.

CALENDULA, Pot Marigold (a)

The colorful flowers make a wonderful display in the garden and are always admired by those who see them. Blooms freely in early Summer and continues into the Fall. Even though this plant prefers a sunny location and rather dry soil, it does well under widely different conditions, requiring little care to grow to perfection. 18 to 24 inches in height.

CAMPFIRE IMPROVED. A very deep strong orange with distinct scarlet sheen on upper side of each petal. Blooms flat across top and measures 4 inches in diameter. Plants are strong growing and even in habit. Exceptionally long heavy cutting stems in generous quantity on each plant. Pkt. 15c.

ORANGE KING. Rich deep orange red, dark center, continuously grown and selected for over twenty-five years. A fine border specimen and excellent for cutting. Extremely large and most attractive. Pkt. 15c.

NEW SUNSHINE CALENDULA, CHRYSANTHA. Gold Medal Winner, All-America Selections 1934. A clear, buttercup yellow in color with loosely arranged petals, incurved at center and reflexed at edges. Flowers mounted on strong, wiry stems a foot in length; excellent for cutting. Pkt. 15c.

RADIO. Flowers hemispherical in shape with bristling quilled petals, rich glowing orange. Graceful and attractive. Pkt. 15c.

CALIFORNIA POPPY (See Eschscholtzia)

CAMPANULA, Canterbury Bell

CALYCANthemA (b) (Cup and Saucer). Perhaps the most beautiful type; distinct in form, with large bell or cup-shaped flowers surrounded at the base by a large calyx of similar color, the whole resembling a cup and saucer.

Finest Mixed. Pkt. 10c.

CANTERBURY BELL, MEDIUM. A biennial. Comes in white, blue and pink shades. Rather tall growing, beautifully formed flowers, single. Blooms second year from seed, or first year from seed sown in fall.

Finest Mixed. Pkt. 15c.

CARNATION, Dianthus Caryophyllus

Few flowers surpass in beauty of form or delicious fragrance, the richly hued Carnation. The plants are branching but compact, and the handsome blossoms are produced on blue-green stems that are stiff but slender. The double flowers with their thick waxy petals are spicily scented.

CHABAUD GIANT. 18 inches. This variety blooms six months after seeding and continues throughout the Summer. The plants, robust and erect, supply handsome, double, clove-scented flowers of extra large size.

Mixed. Pkt. 15c.

CANDYTUFT (a)

Valuable for masses and edging, and considered indispensable for cutting. Seed sown in April flowers in June; successive sowings should be made at intervals. Hardy and easy to grow, blooming profusely. Height, 1 foot.

GIANT WHITE HYACINTH FLOWERED. Very fine for cutting. Pkt. 10c.

UMBELLATA. Mixed. Pkt. 10c.

CELOSIA, Cockscomb (a)

Very attractive and showy, somewhat tender annual, producing massive heads in rich shades of crimson and yellow flowers. Should be started in hot beds and transplanted to rich soil after warm weather comes. Set plants a foot or more apart.

CRISTATA. Choice mixed; height, 9 to 18 inches. Pkt. 15c.

PLUMOSA (Improved Feather Type). Choice mixed; height, 2 feet. Pkt. 15c.

CENTAUREA

Particularly well adapted for border planting. The types cultivated for their flowers have bulging calyxes from which many finely cut petals expand. Others have a downy growth on their leaves, making the foliage quite ornamental. All of them are of easy culture from seed.

CORNFLOWER, JUBILEE GEM. Silver Medal, All America Selections 1937. A dwarf variety of Cornflower making a compact plant literally covered with flowers. About 12 inches in height. Easy to grow. Admirable as a border plant. A fine cut flower. It may be sown outside in the autumn for spring flowering, or in the spring for summer flowering. Pkt. 15c.

CYANUS DOUBLE (a). (Bachelor Button). This superb class of Cornflowers produces handsome, large double blooms, effective out-of-doors and in bouquets. Height, 2 to 3 feet.

BLUE BOY. Pkt. 10c.

ROSE. Pkt. 10c.

Mixed. Pkt. 10c.

SWEET SULTAN (a). These beautiful long stemmed flowers with their soft velvety heads make very enchanting bouquets. They measure 2 to 2½ inches across while the entire plant stands about 2½ to 3 feet tall. You can grow them readily in any fair garden soil, and your friends are sure to admire them.

Mixed. Pkt. 10c.

CARDINAL CLIMBER (ac)

Graceful climber with cardinal-scarlet blooms 1 to 1½ inches in diameter. Rich, glossy, dark green foliage. Grows 15 feet tall and is in bloom all Summer.

IPOMOEA CARDINALIS. Pkt. 25c.

CLARKIA (a)

An annual, flowering in July, which should be far more widely known. It is of easy cultivation, graceful in habit of growth, and lends itself as well to bedding as for cutting. Flowers in long racemes which open in water when cut.

ELEGANS. Double. Choice mixed. Height, 2 feet. Pkt. 10c.

COCKSCOMB (See Celosia)

COLUMBINE (See Aquilegia)

CORAL BELLS (See Heuchera)

KEEP YOUR FLOWER GARDEN UP-TO-DATE- WITH NOVELTY ANNUALS

HOW? WHEN? WHERE? WHY?

Gardening . . . the answer to a fundamental need

Too Much Work?

To those who have never known the pleasures of gardening and growing flowers, this glorious activity may seem like hard work. Yet those who predicted that people were lazy and would quit growing plants as soon as the wartime food emergency was over have been amazed at the enthusiasm with which millions of Americans have kept right on growing things. That, of course, didn't surprise those who have always gardened because they know that no other single occupation of man gives as much pleasure to so many people. Folks keep on gardening simply because it's fun.

Or perhaps "fun" is too small a word to use in describing the satisfaction that comes from gardening. Maybe the better way to describe that satisfaction is to tell about the father who said, not so long ago, "Regardless of what the food situation may be, you can be sure I'll keep on gardening. It's the only recreation I've found that the whole family can enjoy together. We have two boys and two girls who never could agree on a common family activity. Now all of us work together in the garden and enjoy it. I'm certain that gardening has brought us closer together as a family."

Yet while gardening is an activity in which the entire family can take part, it is just as much one which needs no company to enjoy.

There is no need to find a course or playing field, or to travel miles to engage in gardening. And millions of Americans find that they don't need a long uninterrupted week end to do a good job of growing things: they manage to fit in their gardening between other tasks and pleasures.

A Fundamental Need

Perhaps the downright satisfaction and pleasure we get out of gardening is evidence that we all need some contact with the soil: that such a contact satisfies some fundamental want in man.

At the same time, there is no reason why we should work any harder than is necessary. Gardening can be hard, or it can be easy. Here is a trick that will help lighten the work for you:

Mulching vs. Cultivation

Sometimes half-truths are as good as whole ones. The furor created by the book, "Ploughman's Folly," which advocated a trash mulch at the surface made sense as far as the mulch was concerned. By plowing or digging in the conventional way and then mulching, the home gardener can take advantage of good soil preparation, plus the

very real saving in labor that comes from using a mulch.

With the right mulch, there is no need to weed, no need to stir the soil, and once that mulch is applied, the need for watering (at least in normal seasons) is all but over. This should save hours of valuable time.

How to Mulch

A mulch is merely a covering of some material which won't support weed growth, and which is porous enough to trap air. This porous quality is important because it keeps down the loss of moisture from the soil and also keeps the heat of the sun from penetrating deeply and hurting root growth.

A perfect mulch is well-rotted, old manure. Never use fresh manure for a mulch because it will ferment and rot, and some of the gases released in this process can damage plants. But when well-rotted, manure not only keeps down weeds and saves moisture, but can be worked into the soil after the growing season is over.

If grass clippings are allowed to lie on the lawn for a day or two to cure, they can be applied in thin layers, and gradually built up to form a thick mulch. If not dried, they may ferment and cause trouble.

Peat moss, if moist when applied, and if kept moistened, makes a perfect mulch. But since it may suck water away from the plants unless already moist, it must never be applied bone dry, nor should it be allowed to dry out. It is clean, weed-free and a good insulator.

Buckwheat hulls, rice hulls, ground corn cobs and clean straw are other materials that are satisfactory.

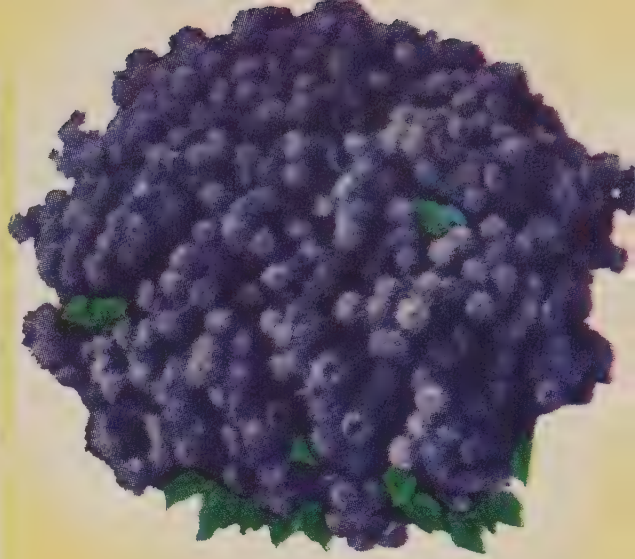
When to Mulch

Most gardeners wait too long to mulch. The soil should be moist, but not wringing wet. If spring rains have made the ground soggy, wait until you can cultivate without packing, and then apply. If the ground is dry, soak the soil thoroughly before mulching.

Mulching and Watering

Always keep in mind that a mulch does not add any water to the soil, nor does it prevent the loss of water through the leaves of the plant. If rains heavy enough to penetrate the mulch do not fall, then you will have to water. This can be done by removing the nozzle from the hose and allowing it to flow out on top of the mulch. If the mulch is thick enough, there should be no washing of the soil.

Clean straw used as a mulch under tomatoes will keep the fruit clean, and in addition will save the labor of staking.



AGERATUM,
Midget Blue



ESCHSCHOLTZIA,
California Poppy



COSMOS,
Radiance



IPOMEA,
Heavenly Blue

COREOPSIS (p)

One of our most popular perennials; the attractive flowers are borne in great profusion and are excellent for cutting. Height, 3 feet.

GRANDIFLORA DOUBLE SUNBURST. Much of the beauty of early Summer gardens is due to the brilliant golden yellow of Coreopsis plantings. The double flowers are large, 1½ to 2 inches across, deep golden yellow, and are excellent for cutting as well as for garden decoration. Fine keepers; plants are easy to grow. Pkt. 15c.

CORNFLOWER (See Centaurea)

COSMOS (a)

No garden is complete without Cosmos. These old favorites supply a gorgeous, colorful effect during late Summer and Fall. Fine for cutting as the flowers last well in water. Cosmos are easy to grow.

RADIANCE. Top award winner for 1948. A striking new color combination never before seen in Sensation Cosmos. Deep rose petals overlaid with large, well-defined zone of rich crimson. Pkt. 25c.

YELLOW FLARE. Bright clear yellow, the new Yellow Flare Cosmos brings a new shade to this family. For many years gardeners have been wishing for a yellow Cosmos and here it is fresh and glowing. Single flowers 2½ in. across produced in great masses on 3-foot plants. Pkt. 10c.

SENSATION PINKIE. The finest new development in Cosmos. Flowers very large, as much as 5 inches in diameter, with broad, heavy fluted petals, slightly overlapped. Ideal for cut flowers. Sturdy plants 3 to 4 feet high, producing flowers 8 to 10 weeks from seed. Pkt. 15c.

SENSATION DAZZLER. A mammoth type similar to Pinkie but of a dazzling crimson shade. Very startling, true to form, immense in size. Pkt. 15c.

SENSATION PURITY. Purity is the glistening white Cosmos in the Sensation type as Pinkie is the delightful rose pink shade. Pkt. 15c.

SENSATION MIXED. Pkt. 15c.

ORANGE RUFFLES. Semi-double. A worthy and new semi-double Orange Flare type Cosmos. Vivid and intense golden orange, the two or three extra rows of petals lend an airy butterfly-like beauty to the richly colored large blossoms. Free blooming, early flowering. Grows to a height of 3 to 4 feet. Pkt. 15c.

EARLY DOUBLE CRESTED. Showy plants, 3 to 4 feet tall, covered with a mass of lovely, large flowers. Our strain produces a large percentage of double blooms.

Mixed. Pkt. 15c.

DAHLIAS (From Seed)

UNWIN'S DWARF HYBRIDS, IMPROVED. This is an improved strain of this popular flower. They grow from 18 inches to 2 feet tall and come in many delightful shades. We offer an improved strain which gives you a wider assortment of choicer colors. Produces a high percentage of doubles from seed. Mixed colors. Pkt. 25c.

COLTNESS DWARF HYBRIDS. A very dwarf variety for bedding. This strain produces many beautiful pastel shades and a high percentage of single flowers. The finest of the Dahlias for cutting. Growing the miniature Dahlias from seed is becoming a popular garden practice. Mixed colors. Pkt. 25c.

DIANTHUS, Pinks (a)

A charming class of annual flowers for beds, borders, edgings, and cutting. The dwarf, rather compact plants average 1 foot in height. Of easiest culture, succeeding in ordinary garden loam. Blooms from July until frosts.

SWEET WILVELSFIELD SINGLE. A lovely, sweet scented Pink of recent introduction. Annual growing to 12 inches tall. Excellent for cutting and certainly an attraction in the garden because of its pleasing odor. Pkt. 15c.

HEDDEWIGII LACINIATUS DOUBLE MIXED. Superb flowers rivaling the Carnation in size and doubled blossoms. Excellent for bouquets. Pkt. 10c.

DIANTHUS BARBATUS (See Sweet William) DIGITALIS, Foxglove (b)

This ornamental hardy plant is used extensively for naturalizing in shrubbery borders and along the edges of woods. It grows well under almost all conditions, giving a wealth of bloom during June and July. Height, 4 to 6 feet.

GLOXINIAEFLORA. This is an improved strain of the ordinary Foxglove, with handsome spotted Gloxinia-like flowers on long spikes.

Mixed Colors. Pkt. 15c.

DELPHINIUM (p)

One of the greatest charms of hardy Larkspurs is in their shades of blue which range from soft rosy lavender to violet and deepest indigo. The dwarfs are valuable in the border while the magnificent tall varieties are stately and beautiful in front of a shrubbery background. Above the deeply cut dark green leaves rise long floral spikes. Height, 1 to 8 feet.

PACIFIC HYBRIDS. A new strain of Delphiniums originated on the Pacific Coast to grow under Pacific Coast conditions. Huge flowers, 2½ to 3½ inches in diameter, beautifully spaced on well-balanced tall spikes. Highly resistant to mildew. Color range excellent and comes practically 100% Double florets. Pkt. 35c.

BLACKMORE & LANGDON HYBRIDS. Without question the finest strain of large flowered hybrid Delphiniums. Various shades and color combinations in the individual flowers. Will produce amazingly large flowers and spikes. Pkt. 25c.

ESCHSCHOLTZIA

California Poppy (a)

The state flower of California and one of the most attractive low growing annuals. The foliage is finely cut, fern-like, and silvery green in color. They start to bloom in a few weeks after the seed is sown. Height, 12 to 18 inches.

GRANDIFLORA HYBRIDS. Large flowering varieties in the most exquisite shades of gold, copper, bronze, scarlet, purple and crimson. Mixed Colors. Pkt. 10c.

AURANTIACA, ORANGE. The ordinary California poppy. Pkt. 10c.

FLAX (See Linum)

FOUR O'CLOCK, Marvel of Peru (a)

A favorite showy annual for beds and borders. Excellent for planting in front of the porch or alongside the house. The plants bloom freely from July until frost.

Tall, Mixed. 2 feet tall, in many fine colors. Pkt. 10c.

FOXGLOVE (See Digitalis)

GAILLARDIA, Blanket Flower

SINGLE MIXED (a). Large daisy-like blossoms of yellow and bronze with central cones of yellow. Pkt. 10c.

PICTA LORENZIANA DOUBLE CHOICE MIXED. This is a new large, double Gaillardia of recent introduction. Fine form, good color range, extremely attractive and easy to grow. Pkt. 25c.

DAZZLER. Large, well formed flowers, very vivid in the garden as the name implies. Golden yellow and maroon red. Striking perennial. Pkt. 15c.



MARIGOLD, French Dwarf



CALENDULA, Frilled Beauty



CELOSIA, Feathered

FLOWERS REPAY FOR A FEEDING OF GOOD FERTILIZER



ZINNIA, Black Ruby



MARIGOLD, Naughty Marietta



PETUNIA, Rose Marie



CLEOME, Pink Queen



PETUNIA, Cheerful



MARIGOLD, Flash

HOW? WHEN? WHERE? WHY?

Practical answers to every-day questions about home gardening

Pinching Back Flower Plants

If sturdy, stocky plants are wanted, they will need "pinching back." When five or six pairs of leaves have formed, pinch out the top, leaving two or three pairs of leaves on the stem. New shoots will come where the leaves join the stem. Sometimes a second pinch can be made, when these new shoots in turn have formed four or five pairs of leaves, leaving two pairs on each. Pinching increases the number of flowers, though sometimes it decreases their size. Petunias particularly need pinching back if they are to remain short. Towards the end of the flowering season, after Petunias have grown long and lanky, they can be cut back to within an inch or two of the ground and they will throw out new growth. If given a light feeding of mixed fertilizer, these rejuvenated plants will often bloom as well as younger plants early in the season.

Removing Flowers

The gardener can lengthen the blooming season of all annuals and some perennials by removing old flowers as soon as they fade, and preventing the plant from going to seed. Delphiniums and Canterbury Bells will usually respond to this treatment by producing a second crop of flowers in fall.

Flowers in the Vegetable Garden

To have plenty of cut flowers without

disturbing your flower borders, plant a few rows of flowers along the edge of your vegetable garden. Or set them out between rows of early lettuce or radishes, where they can bloom after the vegetables have been used.

Large Flowered and Double Petunias

These should never be direct seeded outdoors, but must be started indoors. Use a flat filled with seed-starting mixture. Press soil with a brick or flat piece of wood to firm it. Wet thoroughly. Then broadcast the seed on the surface of the soil. Cover entire flat with a pane of glass and then with a sheet of newspaper. Set in a warm, dark place at 75° to 85° until seed germinates. Then move to a sunny window. If flat dries out slightly before seed sprouts, water carefully with an atomizer. Transplant seedlings when second pair of leaves forms. Move into the garden after danger from frost is past.

D. D. T. and Aster Yellows

Though wilt resistant asters solved the wilt problem, Aster Yellows are still a menace. Now, with D.D.T., we can keep off the leaf hopper, the insect that carries the virus of Yellows to the Aster plant. Regular spraying or dusting with D.D.T. will leave a residue which will kill the leaf hopper when it lights on the plant and before it can stab the leaves and pass on the

virus. So if your Asters have been disappointing lately, try again, using D.D.T.

Formula for Pansy Growing

Pansies are not annuals but near-hardy perennials that need special culture. Cold frames, with glass sash and mats for winter protection are essential. Soil should be rich: up to one-third of soil can be well-rotted manure or sifted compost. Sow seed in August. Protect frame with shades made by tacking muslin or cheese cloth over window screens. Thin plants to stand 4" x 4". After first frosts, cover with glass and mats, and allow to freeze slowly. Remove mats in early spring and allow sun to warm frame. Move plants into permanent position when in full bloom. Keep faded flowers picked: they will stop blooming if any seeds are allowed to form. Growing good Pansies from seed is the test of a real gardener.

Two Interesting House Plants

The Heavenly Blue Morning Glory makes an excellent house plant for winter flowering if grown in a sunny window. Start new plants in late August, using 6" pots (they make heavy root growth). They can be trained up strings on either side of the window. Lobelia plants can be lifted just before frost, cut back, potted and will flower indoors in late winter.

GEUM, Avens (p)

Beautiful hardy perennials, bearing profusely large, showy, double, dark crimson flowers all through the Summer. An elegant flower for bouquets. Height, 18 inches.

LADY STRATHEDEN. A new golden yellow with large full flowers of great beauty. Pkt. 15c.

MRS. BRADSHAW. Large, double, brilliant orange-scarlet. In flower throughout the entire summer. Pkt. 15c.

GOSETIA, Satinflower (a)

Very handsome annual plants especially suited for semi-shady locations. Sow in Spring in the open and thin to 8 or 10 inches apart. The flowers are bright and colorful and the single sorts are not unlike the Azalea in form.

TALL DOUBLE. Long graceful spikes are decorated with double blossoms resembling satin pompons one above another. Height, 2 feet. **Choice Mixed Colors.** Pkt. 15c.

ORNAMENTAL GOURDS (ac)

Ornamental Gourds are easily grown in rich soil, where they will produce plenty of fruits. They may be trained on trellises and the ripened fruits used for ornaments.

Large and Small Sorts Mixed. Pkt. 10c.

GYPSOPHILA, Baby's Breath

ELEGANS GRANDIFLORA (a). London Market Improved. An improved annual strain with single large pure white flowers. Sow at intervals for a supply of flowers throughout the Summer. Height, 2 feet. Pkt. 10c.

PANICULATA WHITE (p). Hardy perennial with sprays of tiny rose-shaped blooms. If cut before the flowers are fully opened, sprays can be used in winter bouquets. Height, 3 feet. Pkt. 15c.

DOUBLE WHITE (p). Each flower double, pure white. Excellent for dry bouquets if cut and treated like the single variety. Good cut flower. Pkt. 25c.

HELIANTHUS, Sunflower (a)

SUN GOLD, Double Sunflower. Dramatic and striking in beauty. All double in a brilliant golden yellow color. Blooms 4 to 5 inches in diameter, are a delight in a background planting in full sun where they will produce a vivid splash of color in mid-summer. Plants reach a height of 4 to 5 feet depending upon soil and climate. Very free flowering. Pkt. 15c.

HELICHRYSUM, Straw Flower (a)

The finest of all Everlastings. They make unusually fine Winter bouquets if cut when partially opened and dried slowly in a cool place, heads downward to keep the long stems straight. The centers of the double pompon-like flowers are nearly covered by the stiff overlapping petals. A wide range of brilliant and soft colors. Height, 2 to 3 feet.

Finest Mixed. Pkt. 15c.

HEUCHERA, Coral Bells

A perennial growing 1½ to 2 feet. We offer a new strain of Coral Bells in a rich scarlet hue. Bell shaped blooms on slender spikes 12 to 18 inches long. Blooms from June to September. Fine for borders, rock gardens and for cutting. Best if left undisturbed in a secluded area of the garden. Spreads rapidly but never a pest. Pkt. 25c.

HOLLYHOCK, Althaea (p)

The beautiful color effects produced by the planting of these flowers, render them indispensable for the old-fashioned garden or the herbaceous border. Height, 6 to 12 feet.

INDIAN SPRING. Silver Medal, All-America Selections, 1939. Semi and double flowers of bright rose and rosy carmine. Its many flowered branches produce a continuous show until frost. Flowers first year from seed. Pkt. 15c.

DOUBLE TRIUMPH MIXED. Beautifully fringed rosette flowers in many new shades and bi-color combinations. Pkt. 15c.

IBERIS (See Candytuff)

ICELAND POPPY (See Poppy Nudicaule)

IPOMOEA, Morning Glory (ac)

SCARLETT O'HARA. Gold Medal, All-America Selections 1939. An entirely new color in the popular Morning Glories—rich dark wine red or deep rosy crimson. Flowers 4 inches in diameter, freely produced on fast growing vines. The dark green foliage does not make a heavy growth, leaving plants graceful in appearance. Pkt. 15c.

PEARLY GATES. Silver Medal, All-America Selection 1942. A big, satiny white morning glory with a creamy shading in the throat. Early blooming climber, literally covered with lovely flowers. Company to Clark's Early Heavenly Blue. Pkt. 15c.

CLARK'S EARLY HEAVENLY BLUE. A variety that is bringing new popularity to Morning Glories. It is an early blooming climber, literally covered with lovely flowers of sky-blue. Flowers 2½ inches across and blooms until frost. Pkt. 10c.

GEUM

Mrs. Bradshaw



MIXED IMPERIAL. These are beyond question the handsomest of all Morning Glories. The flowers are of gigantic size and their colorings beyond description. Pkt. 15c.

LARKSPUR (a)

Annual Delphiniums are adorned with finely cut, feathery foliage which set off to advantage the handsome long floral spikes of double blossoms. The colors range from pure white through soft shades of lavender and pink to deep blue.

GIANT IMPERIAL. Tall, upright, compact, basal branching in habit, the Giant Imperials have superseded all other types of Larkspurs for general garden use. Their delphinium-like spikes of double florets are carried on stout stems 4 to 5 feet.

WHITE KING. Special Mention, All-America Selections, 1937. The flowers are a pure, glistening white, with extremely large double florets, sometimes measuring 2 inches across, evenly spaced on the stem. Early, the finest Larkspur. Pkt. 15c.

BLUE SPIRE. Very deep violet blue. Outstanding blue. Pkt. 15c.

PINK PERFECTION. The 2-inch florets of rounded broad petals are evenly and closely spaced on the stem, giving a very heavy Hollyhock-like cutting spike 24 inches or more in length. Color is a very luscious shade of lively light pink. Pkt. 15c.

Finest Mixed. Pkt. 15c.

LINARIA, Miniature Snapdragon (a)

This interesting species bears flowers which resemble miniature Snapdragons ending in single elongated spurs. It includes both trailing and erect growing varieties which are little known but worthy of greater attention. Height, 8 to 18 inches.

MAROCCANA MIXED. This is an erect sort with finely cut foliage and with blossoms clustered on upright spikes. The colors which are varied embrace many shades of crimson, orange, and blue. The plant is in flower within two months. Pkt. 15c.

LINUM, Flax (a)

GRANDIFLORUM RUBRUM. An old favorite with large, rich crimson blooms borne profusely on plants growing 18 to 24 inches tall. Though the flowers last only one day, new ones appear every morning. Pkt. 10c.

PERENNIAL BLUE. A beautiful shade of Blue Linum (Flax), grows to 2½ feet. Fine for borders. Thrifty grower, adapts itself to most any type of soil. Pkt. 20c.

LOBELIA (a)

A dainty and continuous blooming annual of compact growth, remarkable for its profusion of beautiful blue flowers. Unexcelled for edging, ribbon beds, hanging baskets or window boxes. Height, about 6 inches.

COMPACTA, CRYSTAL PALACE. Erect and very free blooming. Best dark blue for edging. Fine for pots. Pkt. 15c.

HYBRIDA PENDULA SAPPHIRE. A trailing annual useful in pots and flower boxes where it can trail over the edge and display its beautiful deep blue, white-eyed flowers. Pkt. 15c.

LUPIN, Sun Dials

Thrive in almost any situation. Sow where they are to bloom in May, and as plants grow, thin out to 1 foot apart.

RUSSELL LUPINS. Long, closely furnished spikes flower in a great variety of rich colors—deep yellows, oranges, reds, and brilliant bi-colors never seen in Lupins before. The florets are large with a flat fan-like back-standards, and unlike all other Lupins, most of the spikes retain their florets throughout the whole period of development. Awarded the Royal Horticultural Society's Gold Medal, June, 1937. Pkt. 25c.

MONARCH CARRIES A COMPLETE LINE OF GARDEN TOOLS

MARIGOLD (a)

FLASH. A new single type of Marigold, blooms 8 weeks from seeding and continues all summer and fall. Never have we seen a Marigold so uniform in habit nor one which blooms so profusely. Individual flowers of this new single French Marigold grow 1¾ inches and more across; the plants 18 inches tall. Fine for beds, borders and cut flowers. Easy to grow. Pkt. 15c.

SCARLET GLOW, Dwarf French Double Marigold. Grows to a height of 12 inches, bearing a profusion of mahogany red blossoms turning to orange scarlet. Very attractive as a border specimen. You'll enjoy this colorful Marigold as it is covered with colorful blooms from the start of the season until frost. As in the case of all flowers, Scarlet Glow will bear through the entire season if you'll keep the faded blooms picked. Pkt. 15c.

SPRY. The most profuse blooming of all Marigolds. Extremely dwarf and compact, their maximum height being 9 inches and their spread 15 inches. Flowers are composed of a pincushion crest. Center bright, clear yellow and guard petals are a lovely contrasting mahogany-red. Pkt. 15c.

MINIATURE, YELLOW PYGMY. Honorable Mention. All-America Selections, 1940. Light lemon yellow. Lilliput French double type, growing only 8 inches tall and compact. Small, 1¼ inches, blooms rather free. Excellent for edging and potting. Pkt. 15c.

GIGANTEA, FULL DOUBLE MIXTURE. Very showy, fragrant, and of exceptional size. Flowers are largest ever known in Marigold group, averaging 5 to 7½ inches. A mixture ranging from deep orange through golden orange, deep golden yellow, light yellow, lemon yellow, and a delightful new shade of primrose. Pkt. 15c.

AFRICAN TALL DOUBLE (*Tagetes erecta*). Very large globular flowers composed of compact tubular or quilled petals. The stems should be cut carefully to avoid the somewhat disagreeable odor when bruised. Grows 2½ feet tall. Comes in two shades; orange and yellow. Please specify which color or if mixed colors are desired. Pkt. 15c.

Mixed Colors. Orange and yellow. Pkt. 10c.

HARMONY HYBRIDS (All-double). An improved Harmony type. Wide and varied range of striking color combinations embracing mahogany, orange and yellow. Flowers 1¾ inches in diameter with crested center and flanking guard petals. Very early and 100 per cent double. This is an exceptional improvement in medium-dwarf French type marigolds. Pkt. 15c.

DWARF FRENCH, DOUBLE, MONARCH STRAIN. Award of Merit, All-America Selections, 1934. An excellent variety for low borders. A very compact type, with large double flowers, in a wide range of colors, in combination of orange, bronze, yellow and mahogany.

Finest Mixed. Pkt. 15c.



TALL OR CLIMBING NASTURTIUMS. For covering trellises, fences, arbors, piazzas, trailing from vases, over-rock-work, etc., nothing can equal their great quantities of bloom from early Summer until frost. The seed pods can be gathered while green and tender for picking. Height, 8 to 10 feet.

Finest Mixed. Pkt. 15c.

NEMOPHILA

BABY BLUE EYES. A quick grower; early bloomer. Bears a profusion of lovely cup-shaped, sky blue flowers with white centers. Charming for the rock garden or for ground cover among tulips and narcissi and for edging. Plants grow 6 to 8 inches tall. Pkt. 15c.

NIEREMBERGIA HIPPOMANICA (ra)

NIEREMBERGIA, PURPLE ROBE. Bronze Medal, A. A. S. 1942. *Nierembergia, Purple Robe*, a very fine deep violet-purple shade, which maintains its deep color even in full sun and does not fade in the hottest climate. The plant is a neat compact extremely free-flowering one; is only 6 inches tall, with a mature spread of some 10 to 12 inches. A half-hardy perennial, Purple Robe blooms the first year from seed, but must be sown early indoors, for it takes 15 weeks from seeding to flowers. Pkt. 25c.

PETUNIA (a)

The seed may be started indoors early in the year in seed boxes and later transplanted or sown out of doors in the Spring. Cover very lightly and apply water with a fine spray. Be careful not to discard the smaller and weaker seedlings. From these the finest flowers are often obtained, the coarse growing plants frequently reverting to the common types.

PETUNIA HYBRIDA NANA ERECTA. 1 foot. A fine type of petunia for small beds and borders; often used for pot culture. This petunia type holds its habit very well during the entire blooming season.

ROSY MORN. Soft rose-carmine-pink with a white throat. Dwarf growing and a luxuriant bloomer. Pkt. 15c.

MIXED HYBRIDS. A very decorative show may be had by sowing these mixtures. All colors combine to make a very fine Display. Pkt. 10c.

FLAMING VELVET. This is a very large grandiflora single type with plain edge identical to the *erecta* type hybrids. The color is luscious velvety blood red. Flaming Velvet is one of the most satisfactory petunias both for vigorous growth and beauty of color. Pkt. 15c.

Single Balcony Petunias

A splendid large and free-flowering type for window boxes, vases, hanging baskets, etc. The flowers average 3 inches.

DEEP BLUE. Certificate of Honor, Royal Horticultural Society, 1935. Pkt. 15c.

ROSE. Rich fiery rose. Pkt. 15c.

WHITE. Award of Merit, Royal Horticultural Society, 1935. Pkt. 15c.

Mixed Colors. Pkt. 15c.

Grandiflora Single Fringed

THEODOSIA. Soft rosy pink with contrasting veined golden yellow throat. An outstanding variety in this class. Pkt. 25c.

ELK'S PRIDE. This is by far the finest, largest, darkest, and best velvety purple in the single group of petunias. Pkt. 25c.

Ruffled Giants of California

GLAMOUR. Glamorously lovely, this outstanding Petunia is a number one favorite with all who have seen it. A luscious shade of salmon rose, delicately veined brown in creamy open shallow throat, the five to six inch blooms have satiny petals heavily ruffled and unusually dainty. Plants develop to 2 to 2½ ft. A new color in this type of Petunia. Pkt. 35c.

SUPREME STRAIN. A new strain of rose and pink shades, light, richly-veined throats surrounded by satiny petals which are heavily suffled. Large blooms, 5 to 7 inches in diameter, produced on strong, richly-foliaged plants. Excellent bedding variety; fine window box type. Pkt. 35c.

MARVEL OF PERU (See Four-o'clock)

MORNING GLORY (See Ipomea)

MOSS ROSE (See Portulaca)

NEMESIA (ra)

This plant is excellent for edging purposes. Plants send up many slender stalks crowned with fairy-like flowers, something like the *Schizanthus*. When the flowers fade they may be trimmed back and will bloom again. Their colors run from the brightest reds, yellows, oranges, to the brightest blues and purples. Height, 6 to 12 inches.

COMPACTA TRIUMPH, FINEST MIXED COLORS. Pkt. 25c.

NASTURTIUM (a)

GOLDEN GLEAM. Plant forms a vigorous large bush which throws out short runners, averaging 18 inches. The sweet scented, large double flowers are golden yellow and average 2 to 3 inches across. Pkt. 15c.

SCARLET GLEAM. A sister of Golden Gleam. Its semi-double blossoms are similar in size and shape to those of the popular golden Nasturtium. Rich, dazzling scarlet. Sweet scented. Fine for cutting. Pkt. 15c.

GLORIOUS GLEAM HYBRIDS. Award of Merit, All-America Selections, 1935. Delightfully sweet scented; double. Color range includes brilliant blend of salmon, golden yellow, orange scarlet, cerise, cream, orange, maroon and crimson shades, and many spotted varieties.

Mixed Colors. Pkt. 15c.

DWARF DOUBLE GOLDEN GLOBE. Award of Merit, All-America Selections, 1936. Vivid golden yellow, identical in color to Golden Gleam. Plants uniformly dwarf and compact, and bear great quantities of semi-double sweet scented flowers. Excellent for edging and window boxes. Pkt. 15c.

DWARF DOUBLE GEM MIXTURE. Novelty introduction, 1935. An evenly balanced range of colors on dwarf, compact gem-like plants. Ideal annual for border and edging use. Plants are dwarf and compact, totally without runners.

Mixed Colors. Pkt. 15c.

FLOWERS REPAY FOR A FEEDING OF GOOD FERTILIZER

SPECIAL NOTES ON FLOWER CULTURE

For simple cultural data on each of the flowers listed here, refer to the notes indicated by the letter after each.

Ageratum.....A	Carnation.....C	Gaillardia.....D	Nemophila.....A
Alyssum (a)....A	Castor Bean...B	Geum.....D	Nicotiana.....A
Alyssum (h.p.) D	Celosia.....A	Godetia.....A	Pansy.....D
Anchusa.....B	Chrysant'mum A	Gourds, Ornmtl. B	Petunia.....C
Antirrhinum...C	Clarkia.....B	Gypsophila....D	Phlox.....C
Aquilegia.....D	Cleome.....B	Helianthus....D	Poppy, Ic. Mxd. A
Arctotis.....A	Coreopsis....D	Hollyhock.....D	Portulaca.....C
Aster.....A	Cosmos.....C	Kochia.....B	Salpiglossis...A
Bachelor's	Cynoglossum...B	Larkspur.....C	Scabiosa.....A
Button.....C	Dahlia.....A	Linum (a).....A	Schizanthus...A
Ballon Vine...C	Delphinium...D	Linum (w.p.)...D	Shasta Daisy...D
Balsam.....B	Dianthus.....C	Lobelia.....A	Snow-on-the-
Blue Lc. Flower B	Eschscholtzia .C	Lupines.....C	Mountain...B
Calendula....C	Everlas'g Flwr..A	Lupins.....D	Statice.....A
Calliopsis....A	Four O'Clock...B	Marigold.....A	Stocks.....A
Candytuft....C	Gaillardia.....A	Mignonette...C	Tithonia.....B
		Moon Flower...B	Verbena.....A
		Morning Glory..B	Zinnia.....A
		Nasturtium...B	

A—These Do Well When Sown Where They Are to Bloom

These annuals can be started outdoors directly for blooming where sown, or can be transplanted if they come up too close together. A special outdoor seed bed can be used to start enough plants to fill an entire garden. Because of the small area that will be needed, a special soil, made up as recommended under "Transplanting," can be used in this bed. This method is convenient when tulips and other bulbs occupy the beds in early spring.

B—Do Not Transplant These

These annuals do not tolerate transplanting, and should be sown thinly where they are to bloom. Mixing seed with sand before sowing will help distribute them evenly and thinly. Thin to proper spacing if they come up too thickly.

C—Seed These Early—Or in Late Fall

The hardy annuals in this group can be sown outdoors as soon as the soil can be worked in spring. Or they can be seeded in fall, just before the soil freezes for the winter and will sprout long before the soil can be worked in spring. Because these early seedlings are usually through blooming by midsummer, be ready to replant the bed with other annuals for late bloom.

D—Seed Almost Any Time (But Shade the Seedlings)

Perennials (plants that live over from year to year) can be seeded at any time after the danger from frost is over up to early summer. They are best started in a cold frame with some provision for shading the bed. If no cold frame is available, grow them in flats placed under the shade of trees or shrubs, but light sunshine should filter through to them: perennial seedlings won't grow in full shade.

To shade cold frames from full sunlight, cover ordinary window screens with cheesecloth or muslin. After sowing, keep watering with a fine spray (they may need watering twice a day in midsummer heat) until seedlings are ready to transplant. If three pairs of leaves have formed at least a month before killing frost is expected, they can be moved into permanent position the same fall: otherwise carry over in the cold frame until spring. Many perennial seeds sprout slowly: if you have followed directions don't worry if they don't show up within a week or two.

E—Start These Indoors For Early Bloom

These will do well when sown directly in the garden and where late bloom is wanted, some of the packet should be planted in this way. For outdoor culture, see "A." However, for early bloom, some of the seed should be started indoors.

F—These Vines Need Special Treatment

This is for vines that don't transplant well, but need a long season to flower. All need rather high heat, so a warm spot (temperature between 75° to 85°) is necessary. However, watch out that high heat does not dry out seedlings.

Fill 3" pot with seed-starting mixture of soil. Press two seeds into each pot and water well, place in heat until seeds sprout. May be grown in a sunny window, even if cooler, once seedlings are up. As soon as vines begin to twine, provide a stake for support. When danger from late frost is over, knock plants out of pots, disturbing roots as little as possible and set where they are to grow.

If early bloom is not wanted, direct seed outdoors, but ground *must* be warm (wait until after late irises and lilacs have faded). Do *not* grow in rich soil as this promotes leafy growth at expense of flowers. If soil is rich, add gravel or old weathered coal ashes.



HOLLYHOCK, Double

ANTIRRHINUM,
Tetra-Snapdragon



SCABIOSA,
Blue Moon



ZINNIA,
Will Rogers

HOW? WHEN? WHERE? WHY?

Easiest Annuals to Grow

We are often asked to recommend annuals for growing without much care, particularly around summer cottages used only on week ends, or where the soil is poor. We suggest *Calliopsis*, *Gaillardia*, *Marigold*, *Petunia*, *annual Phlox*, *Scabiosa*, *Verbena* and *Zinnia*. These usually bloom profusely without care or extra watering, though some water applied when seed is sown will often insure germination.

Annuals for Fall Bloom

By midsummer, many spring-sown annuals have seen their best days. While *Petunias* can be cut back to force new bloom, others can be replaced by sowing new seed late in June among the old plants. Try *Calendula*, *Candytuft*, *Celosia*, *Eschscholtzia*, *annual Phlox*, *Sweet Alyssum*, and *small flowered Zinnias* for this purpose. These late-sown annuals will need extra watering to germinate and grow. The *Alyssum* and *Candytuft* often survive early frost and keep flowering along with the hardy Mums.

Annuals for Edging

Low growing annuals planted at the edge of a garden make it look neat and finished. The best plants for this purpose are *Sweet Alyssum*, *Ageratum*, *dwarf Marigold*, *dwarf Petunias*, and *Zinnia linearis* or *mexicana*. Edging annuals should be pinched back once to keep them especially low.

Annuals for Fragrance

We are often asked, "What annuals are really fragrant?" We recommend *Alyssum*, *Candytuft*, *Carnation*, *Mignonette*, *Gleam Nasturtiums*, *Nicotiana*, *Petunia*, *Scabiosa*, *Stocks*, *Sweet Peas* and *Wallflower*.

Flowers for Shady Locations

Most annuals need plenty of sunlight, but there are a few which do fairly well in the shade, or with partial sun. The following are worth a trial in shady spots:

<i>Cornflower</i>	<i>Candytuft</i>
<i>Nasturtium</i>	<i>Larkspur</i>
<i>Pansy</i>	<i>Lupine</i>
<i>Nicotiana</i>	<i>Godetia</i>
<i>Vinca</i>	<i>Lobelia</i>
<i>Coreopsis</i>	<i>Bleeding Heart</i>
<i>Cleome</i>	

In the *vine group*, those which often prosper in fairly shady places are *Cardinal Climber*, *Cup-and-Saucer Vine*, and *Morning Glory*.

Flowers for Poor Soil

Of course, the right answer to poor soil conditions is "Improve the soil!" But if you can't or don't want to do this, you can usually get fairly good results in poor soil with these:

<i>Amaranthus</i>	<i>Marigold</i>
<i>Balsam</i>	<i>Nasturtium</i>
<i>California Poppy</i>	<i>Petunia</i>
<i>Calliopsis</i>	<i>Portulaca</i>
<i>Gaillardia</i>	<i>Sweet Susan</i>

Flowers for Hot, Dry Locations

In spots where the sun beats down mercilessly all day long, many flowers can not prosper. But some of the annuals can do well, even in these difficult locations. Here's a good list:

<i>Sweet Alyssum</i>	<i>Marigold</i>
<i>Ageratum</i>	<i>Petunia</i>
<i>Swan River</i>	<i>Phlox, Annual</i>
<i>Daisy</i>	<i>Poppy, California</i>
<i>Bachelor Button</i>	<i>Portulaca</i>
<i>Cosmos</i>	<i>Scabiosa</i>
<i>Dianthus</i>	<i>Zinnia</i>
<i>Dimorphotheca</i>	<i>Four O'Clock</i>
<i>Gaillardia</i>	<i>Salvia</i>

Perennials for hot locations are less plentiful, but you can usually do well with *Babysbreath*, *Perennial Asters*, *Sedum Acre*, *Statice*, and *Blanket Flower* (*Gaillardia*).

For Successive Sowings

Some of the annuals which come into bloom quickly keep blooming for only a little while. If you want them in bloom through the season, make several successive sowings at two to four week intervals. Flowers in this class include:

<i>Calliopsis</i>	<i>Larkspur</i>
<i>Candytuft</i>	<i>Love-in-a-mist</i>
<i>Cornflower</i>	<i>Mignonette</i>
<i>Forget-me-not</i>	<i>Poppy</i>
<i>Gypsophila</i>	

Do Annuals and Perennials Need Lime?

Yes, flowers need calcium, which lime supplies. However, it is possible to get too *much* lime. Soils that have a pH of much over 7.2 may need something to make them more acid. From 0.0 to 6.9 is acid or "sour," while 7.0 and above is alkaline or "sweet." All the gardener needs to know about pH is that if he will keep his soil between 6.0 and 6.9, the plant food elements in his soil will be most readily available. Above that, iron, sulfur and other elements lock up and are not available. Below that, other elements, principally calcium, cannot be used by plants. A simple \$1.00 soil test kit will give you a pH reading of your soil and tell you what to do to correct it.

Don't Sprinkle—Irrigate

Old timers talk about sprinkling a garden. Irrigation describes what we are after better than sprinkling, because what we want is a long, slow soaking of the soil so that water penetrates to a depth of several inches.

Water should always be applied so that the roots will be lured downwards rather than growing upwards as is the case when only the surface is moistened. Properly done watering need not be repeated oftener than once or twice a week.

An excellent way to apply large amounts of water is by means of the *Soil Soaker*, which allows water to ooze out slowly onto the surface. For small areas, remove the hose nozzle and allow the stream of water to flow out onto a board to break its force.



ASTER, Wilt-resistant



ANTIRRHINUM, Semi-tall



AQUILEGIA, Long-spurred



CHRYSANTHEMUM, Painted Daisy



DIANTHUS, Lacy Single

PANSY, Heart's Ease (b)

When the bright hues of the Tulips and Daffodils have faded, the rich, deep and varied shades of the Pansies provide a welcome change in the flower beds. The varieties listed produce large blooms of good substance, regular markings, and full rich coloring. Low growing.

STEELE'S JUMBO. Many new and unique colors will be found in this mixture, pastel pinks, apricots, yellow, blues, brass tones, copper bronze, purple, red, in two and three color combinations and selfs. Fine form, heavy substance, long strong stems, fine for cutting and forcing. Very early. See color illustration inside front cover. Pkt. 50c.

MONARCH SWISS GIANT. Within the last few years the blossoms of this strain have been remarkably improved in every way. The plants are compact in habit and they produce immense circular flowers for a long blooming season.

Finest Mixed. Pkt. 50c.

POPULAR BEDDING MIXTURE. These are the popular saucy-faced beauties that everybody loves, comprising the finest in all colors. Pkt. 25c.

PHLOX DRUMMONDI (a)

A valuable and showy annual highly esteemed for bedding, for massing and for borders. The plants grow about 1 foot high, thrive in practically any soil if given a sunny location and bloom the entire season. Seed may be started in boxes and transplanted or sown in the open in Spring.

GIGANTEA, RED GLORY. Here is the brightest color that we have ever seen in phlox. The color is a brilliant red with a large creamy white eye which seems to intensify the red into an unbelievable sharpness. Florets often as large as a half dollar. Pkt. 25c.

GIGANTEA MIXED. A new strain of annual Phlox with single florets as large as an inch and one-half in diameter. The colors are soft pastel shades, such as apple blossom pink, salmon, light blue, pale violet, etc. Pkt. 15c.

PORTULACA, Moss Rose (ra)

Brilliant hardy annual, of easy culture; excellent for massing in beds, edging or rock work, thriving best in a light, sandy soil and a sunny situation. Flowers of the brightest colors. Height, 6 to 10 inches.

DOUBLE MIXED. Pkt. 25c. **SINGLE MIXED.** Pkt. 25c.

POPPY, Papaver

Annual Poppies should be sown as early as possible in the Spring where they are to remain as they do not transplant readily. Mix the seed with builders' sand, using about 25 times as much sand as seed, then broadcast seed on surface of the ground and firm well. Plants should be thinned out to 6 inches apart for best results. Seed may be sown in rows also and in succession up to the middle of May.

ALL-DOUBLE MIXED. Improved strain of all-double Begonia-type flowers. Range of colors from light pink to dark crimson with fair sprinkling of Picotee types in scarlet and vermilion shades. One of the most excellent flowers for mid-summer bloomers and for cutting. Pkt. 15c.

SINGLE MIXED. A superb blend of this beautiful type of Poppy ranging in color from pure white through tones of salmon, pink, and rose to brightest carmine-red. Pkt. 15c.

NUDICAULE (p) (Iceland Poppy). A hardy Poppy slightly resembling the Shirley. Somewhat different in habit and contains many shades of yellow and orange. Height, 18 inches.

IMPERIAL JEWELS, MIXED. The finest strain of mixed colors in Iceland Poppies. The colors are well balanced. Large flowers grow on strong stems from 2 to 3 feet high. Pkt. 35c.

PYRETHRUM, Painted Daisy (p)

This plant is cousin to the Chrysanthemum and Matricaria and

should play an important part in many a well planned garden. Height, 1 to 2 feet.

SINGLE MIXED. Radiating petals in many tones of rose and red about a golden center. Pkt. 20c.

RICINUS, Castor Bean (a)

Magnificent, tall, large-leaved plants of tropical appearance, succeeding in a warm, sunny location. Beautiful for large foliage groups and background. Height, 10 to 12 feet.

MIXED VARIETIES. Pkt. 10c.

SALPIGLOSSIS, Painted Tongue (a)

For delicate grace, richness of coloring, and velvety texture, the regal Salpiglossis has practically no equal. From a low base of leaves rise slender wiry stalks which bear one or more large Lily-like flowers in a magnificent range of colors. Height, 1 to 2½ feet.

SUPERB MIXED. Pkt. 15c.

SALVIA

BONFIRE. This variety grows about 2 feet tall and produces scarlet red blossoms from late summer to frost. The brilliant flower spikes are very attractive, growing very erect and globular. Pkt. 25c.

SCABIOSA, Pincushion Flower (a)

These beautiful hardy annuals are in great demand. They grow about 2½ feet high and bloom from early in July without interruption until cut down by the frost. As a flower for cutting they are very popular. Seeds should be sown any time in the Spring after danger of frost is past.

SALMON BEAUTY. Pure salmon with huge flowers. Vigorous. The stems are long and stiff, making it a most popular flower for the garden or for cutting. Pkt. 15c.

IMPERIAL GIANTS, BLUE MOON. Honorable Mention, All-America Selections, 1939. An entirely different and improved flower and plant from the existing Scabiosa varieties. Fully double extremely large and deep. Petals broad, heavy, and wavy, entirely eliminating the pincushion center, rich deep lavender blue. Tall growing and very upright. Pkt. 15c.

GIANT HYBRIDS, MIXED. Pkt. 15c.

Hardy Perennial Varieties

CAUCASICA. Giant Hybrids (Isaac House Strain). Fringed and ruffled, shades of blue from lavender to dark blue; very large flowers. Pkt. 25c.

SCHIZANTHUS, Butterfly Flower (a)

One of our finest hardy annuals. Of easy culture in any good garden soil. Showy flowers of various colors, closely resembling some species of Orchids. Also useful as pot plants for late Winter and Spring; for this purpose sow in Autumn.

BUTTERFLY MIXTURE. Fine bright mixture, free flowering, compact pyramidal plants, 12 to 15 inches. Pkt. 25c.

SHASTA DAISY,

Chrysanthemum Maximum (p)

It is a hardy plant bearing large white, single blooms with handsome yellow centers. They are valuable for border decoration and especially pleasing in bouquets.

DIENER'S DOUBLE. A new Shasta Daisy of delicate double form. Diener's Double Shasta Daisy is of exquisite form, a strong grower and a welcome addition to this branch of the flower family. Pkt. 25c.

ALASKA. Pure white, extra large flowers. Excellent for cutting. Height, 2 feet. Pkt. 15c.

STOCKS, Gilliflower (a)

These popular flowers are easily grown, are so highly fragrant, and of such great beauty that they deserve a place in every garden. The Early Giant Imperial class are half-hardy annuals.

Continued on Next Page



SALPIGLOSSIS
Painted Tongue



PANSY
Monarch Swiss Giant



SWEET PEA
Spencers

MONARCH CARRIES A COMPLETE LINE OF GARDEN TOOLS AND SPRAYERS

DWARF TEN WEEKS. This early class forms dwarf compact plants that are excellent for edging or low beds. They often do well in sections where plants of the later types cannot be grown. 12 inches tall. Mixed colors. Pkt. 10c.

Ce6o ill

GIANT IMPERIAL (Column Stocks). Long stems and imposing spikes of large flowers make this the outstanding variety. It is about as early as Beauty of Nice and resembles it in habit, except that the plant is less spreading and taller. Height, 2 feet. (See color illustration on front cover.)

Finest Mixed Colors. Pkt. 15c.

SWEET WILLIAM, Dianthus Barbatus (b)

A well known, attractive, free-flowering hardy biennial, producing a splendid effect in beds and borders with their rich and varied flowers. Height, 10 to 20 inches.

NEWPORT PINK. Watermelon pink or salmony rose color. Very beautiful. Pkt. 15c.

Single Varieties, Mixed. Pkt. 15c. **Double Varieties, Mixed.** Pkt. 15c.

TITHONIA

TITHONIA (Golden Flower of the Incas). Sometimes called Mexican Sunflower. We offer only the Speciosa Early Flowering strain. Color orange vermilion, large single flowers, strong heavy growth, attractive late summer and fall bloomer. Pkt. 15c.

SPECIAL MIXTURE SPENCER SWEET PEAS

This is our special mixture and is a blend of the most beautiful colors in Spencer Sweet Peas.

Pkt. 15c; oz. 50c.

GIANT FLOWERING SPENCERS. Prices on following varieties are: 15c pkt., 75c oz., postpaid.

Pink and Rose Shades

PINKIE. Rose-pink with large and frilled flowers. This variety is seldom affected by weather conditions and first-class blooms can be cut all during its long blossoming period. Silver Medal.

YOUTH. This Sweet Pea can be described as a white ground Picotee but with slightly deeper color on the edges than its predecessor in this group. Strongly perfumed.

LULLABY. Charming shade of light rose pink. A strong grower. Award of Merit. National Sweet Pea Society, 1934.

PEGGY ANN. A late flowering variety of great beauty and distinction. A new and glowing shade of salmon pink. Most bewitching under artificial light. Delightfully perfumed. The stems are very long and stout with four huge blooms to a stem.

Lavender and Blue Shades

AMBITION. Rich deep lavender, with a darker shade on the base of the standard and wings when young, lessening as the bloom ages. Gold Medal and Award of Merit.

POWERSCOURT. A clear pure lavender. Has been considered the best lavender for a number of years. It is still the most popular. The flowers are very pure in color.

REFLECTION. A clear blue unlike any blue sweet pea you've ever seen. The color is sunproof, delicate and very sweet scented. A recent introduction.

CHINESE BLUE. Chinese Blue is a solid, rich, deep blue without the objectionable fading out on the edges. The stems are long and bear four blooms throughout. Plants are strong and vigorous with a blooming season longer than that of the average Sweet Pea.

White and Cream Shades

GIGANTIC. Pure white flowers of perfect form and of great substance. Normally produces five-flowered stems when grown under ordinary conditions. Black seeded. Award of Merit.

AVALANCHE. Immense glistening white flowers. The blooms are very frilled. White seeded.

WHAT JOY. Primrose, shading to cream. A charming tone and so far the nearest approach to a true yellow.

Orange and Salmon Shades

GEORGE SHAWYER. A giant orange pink, the standard showing more orange than the wings. The flowers are perfectly formed and nicely placed. Award of Merit.

SMILES. Clear glistening salmon, best describes this exquisite variety. The large flowers are beautifully waved and fluted. Award of Merit.

Cerise Shades

MRS. A. SEARLES. Salmon-cerise, merging into a soft oriental-red. A remarkable and distinct color. No collection is complete without this beautiful Sweet Pea.

Red Shades

RED BOY. The very best crimson. It is a first class Sweet Pea for all purposes, especially for general garden culture. Award of Merit.

WELCOME. By far the best and most brilliant, dazzling, scarlet Sweet Pea. For exhibition or gardens it is supreme. Absolutely sunproof. Silver Medal, Scottish National Sweet Pea Society.

Ruffled Varieties

BONNIE RUFFLES. A rich delicate salmon-pink on cream. Pkt. 15c.

RUFFLED BLUE. A very fine dark blue. Pkt. 15c.

RUFFLED CRIMSON. Rich velvety crimson. A beauty. Pkt. 15c.

RUFFLED EXQUISITE. Salmon cerise. Pkt. 15c.

RUFFLED WHITE. Clear white. Pkt. 15c.

RUFFLED ROSE. A very rich rose. Pkt. 15c.

RUFFLED MIXED. A blend of the above colors. Pkt. 15c.

VIOLA, Tufted Pansies (a)

WALLER FRANKLIN FORMULA MIXTURE. This blend of bright gay colors far surpasses any mixture of Violas we have seen. Bright shades of self colors of red, yellow, blue, and apricot combined with many shades which are blotched, undoubtedly make these Violas a supreme mixture. Pkt. 25c.

VIRGINIA STOCKS, French Forget-me-nots (ra)

Small red, rose and white flowers about 3/4 inch across. Fine for edgings. For continuous display until Fall, several successive sowings should be made about two weeks apart. Height, 6 to 8 inches. Mixed colors. Pkt. 15c.

VERBENA (a)

One of the most popular garden annuals for beds and massing and for a gorgeous display during the Summer months cannot be excelled, commencing to flower in July and continuing until frost. Height, 6 to 8 inches.

SPECTRUM RED. The brightest Verbena in existence. The huge flowers are an intense bright red having no eye, the color is intensified and its brilliance is quite dazzling. Pkt. 15c.

FLORADALE BEAUTY. Special Mention, All-America Selections, 1937. A giant hybrid, the flowers varying from bright rose-pink to deep rose-red of exceptionally brightness. Individual florets of perfect form, fully rounded, and average 1 1/4 inches across; heads or trusses 4 to 5 inches across. Pkt. 15c.

ZINNIA (a)

One of the most satisfactory and showiest of our hardy annuals for beds, mixed borders and for cutting purposes. Easy to grow in any good garden soil. They commence flowering early in the Summer and continue until frost.

DOUBLE DAHLIA FLOWERED ZINNIAS. 2 1/2 feet. Enormous flowers are produced by robust branching plants. The flowers usually have slightly hollowed centers ringed with small tubular florets. The petals are quite loosely placed and tend to curl at the edges, giving the blossoms a crisp, fresh appearance. The following are the cream of the colors in Dahlia Flowered Zinnias.

WILL ROGERS. A recent introduction of very brilliant color and grand form. Lovely, brilliant scarlet-red. You'll like the color. Pkt. 15c.

CRIMSON MONARCH. Deep crimson, large flowers. Pkt. 15c.

DREAM. Deep rosy lavender. Pkt. 15c.

CANARY BIRD. Golden yellow. Pkt. 15c.

ORIOLE. Orange and gold bicolor. Pkt. 15c.

POLAR BEAR. White. Pkt. 15c.

SCARLET FLAME. Bright scarlet. Pkt. 15c.

MIXTURE OF ABOVE. Pkt. 15c.

CALIFORNIA GIANT ZINNIAS. This variety is taller than the dahlia flowered type, growing 3 to 4 feet, with long stems which make the flowers fine for cutting. Blooms are large and flat and very graceful for their size. We recommend California Giants to those who really enjoy zinnias. Improved since their introduction in 1926, they are now exquisitely beautiful in form and color. We offer this sort only in the mixed, believing that the blend of colors will please the most exacting flower lover. Finest shades mixed. Pkt. 15c.

MISS WILMOTT. California Giant Zinnia. A soft two-toned pink, darker at the edges, lighter shade of pink at the center with bright eye. A very attractive Zinnia; one you'll get a full measure of pleasure from, either as a cut flower or as a garden plant. Pkt. 15c.

LAVENDER QUEEN. California Giant Zinnia. A deep rosy, lavender. Planted together with Miss Wilmott, the combination produces a very beautiful color picture. This is a pastel shade (as is Miss Wilmott) and the two combine beautifully in a bouquet or in the border. Pkt. 15c.

FANTASY WILDFIRE. A rich, dazzling scarlet. Wildfire adds a distinct note of color and cheerfulness to the garden and will enliven any home when used in flower arrangements. Plant neat in habit, strong growing, and very free blooming; 2 1/2 to 3 feet in height; coming into flower 45 to 50 days after seed is sown. Pkt. 15c.

FANTASY STAR DUST. Silver Medal, All-American Selection, 1937. The lovely golden yellow variety in the popular Fantasy type Zinnias. Informal, shaggy-petaled, medium-sized flowers on plants 2 1/2 to 3 feet in height; stems of good length for cutting. Pkt. 15c.

FANTASY MIXED SHADES. Pkt. 15c.

LILLIPUT PASTEL MIXTURE. When we think of flowers for cutting, our minds automatically turn to the pastel shades. In this blend of tiny or baby zinnias are incorporated the very lovely soft shades of apricot, peach, creamy yellow, shell pink, delicate salmon, light rose and orchid which are prime favorites with florists, cut flower growers and those who grow and arrange flowers for the home. Don't fail to include a packet or two of this Lilliput Pastel Mixture with your order. Pkt. 15c.

ORDER EARLY, AVOID DELAY

Flower Garden PLANTING GUIDE

KEY—For classification of flowers by purpose, location, etc., see the second column below. The meaning of the key letters in this column is as follows:

- | | |
|------------------------------|-----------------------------------|
| A—For dry, hot locations | G—For their foliage |
| B—For a succession of blooms | H—Everlasting for winter bouquets |
| C—For shady locations | I—For their fragrance |
| D—For poor soil | J—For porch or window boxes |
| E—For edging | K—Climbing Vines |
| F—For the rock garden. | L—For backgrounds |

	Height (Inches)	Suitable for	Average Days to Germinate	Approx. Time of Bloom	Shape of Plant				
Ageratum	4-12	E F J	5-10	10 Wks.	bushy	Four O'Clock	24-30	A D	5-10 3-4 Mos. bushy
Alyssum, Sweet	2-12	B C D E F I J	5-10	6 Wks.	spreading	Gaillardia	18-30	D	15-20 2-3 Mos. bushy
Antirrhinum	12-60	C I L	20-25	3-4 Mos.	bushy	Godetia	12-24	C D	15-20 2 Mos. erect
Aquilegia	18-36	C E F	15	3 Mos.	branchy	Gypsophila	18-36	B H	15-20 8-10 Wks. branching
Balsam	14-20	A E	10-12	6 Mos.	erect	Helichrysum	24-36	H	5-10 3 Mos. bushy
Calendula	12-36	D	10-14	12-14 Wks.	bushy	Hollyhock	48-84	L	5-20 10 Wks. slender
Campanula	18-24	F	8-15	10-12 Wks.	bushy	Kochia	30-36	A B	15-18 Foliage bushy
Candytuft	6-18	B F I	5-10	8-10 Wks.	bushy	Larkspur, Annual	30-72	L	15-20 10-12 Wks. tall
Centaurea	18-36	A B C D E I J	5-20	3-4 Mos.	erect	Lathyrus	60-72	I K	25-40 2-3 Mos. vine
Chrysanthemum	24-36	A E	5-20	8-10 Wks.	bushy	Lobelia	4-8	E J	10 10-12 Wks. bushy
Celosia	12-36	D E H	20-25	10 Wks.	bushy	Marigold	8-36	B J	5-8 6-8 Wks. bushy
Cosmos	36-60	A	5-15	10-12 Wks.	bushy	Mignonette	10-12	B I	3-4 Mos. erect
Coreopsis	18-36	A B D	10-20	4-5 Mos.	bushy	Moon Flower	12 ft. or more	I K	5-8 4-5 Mos. vine
Dahlia, Dwarf	14	F	10	3-4 Mos.	bushy	Morning Glory	12 ft. or more	A K	5-8 3-4 Mos. vine
Delphinium	36-72	L	15-21	3-4 Mos.	tall	Nasturtium	12-36	D E F K	8-15 2-3 Mos. bush. vine
Digitalis	30-48	F	10-20	3-4 Mos.	erect	Nigella	10-18	B F	10-15 10-12 Wks. bushy
Dianthus	4-15	F I	5-10	12 Wks.	bushy	Nicotiana	30-48	I	20-25 10-12 Wks. branchy
Eschscholtzia	10-12	C D F	5-12	12-15 Wks.	bushy	Pansy	4-8	C E F	10-15 10-12 Wks. clump
						Petunia	10-24	D E F J	18-20 10-12 Wks. bushy
						Phlox	10-18	A B C F I J	20-25 8-10 Wks. bushy
						Poppy	18-36	B	20 12-15 Wks. erect
						Portulaca	4-6	A D E F J	18-20 6 Wks. spready
						Salvia	12-42	A	15-25 3-4 Mos. bushy
						Scabiosa	18-30	I	18-20 2-3 Mos. bushy
						Stocks	12-24	I	5-15 12-14 Wks. bushy
						Schizanthus	18-36	C E	20-25 6-8 Wks. bushy
						Sweet Pea	36 or more	K	15-20 10-12 Wks. vine
						Sweet William	12-24	F	10 12 Wks. bushy
						Verbena	6-12	E F J	8-10 12 Wks. spready
						Wallflower	12-18	I	5-12 2-3 Mos. bushy
						Zinnia	12-36	A F	5-10 6-8 Wks. bushy

In all the world, NO FINER FLOWER SEEDS THAN OURS!



PETUNIA, All Double

You may search the land over, but you cannot find flower seeds any better than those we sell! We can give you this absolute assurance because we sell only the tested seeds of the best growers... and we always make sure they are fresh, new crop seeds.



MARIGOLD, Sunkist



COSMOS, Dazzler



LARKSPUR, Ruby



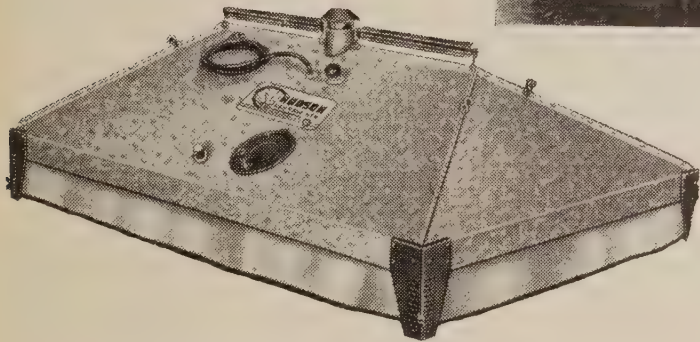
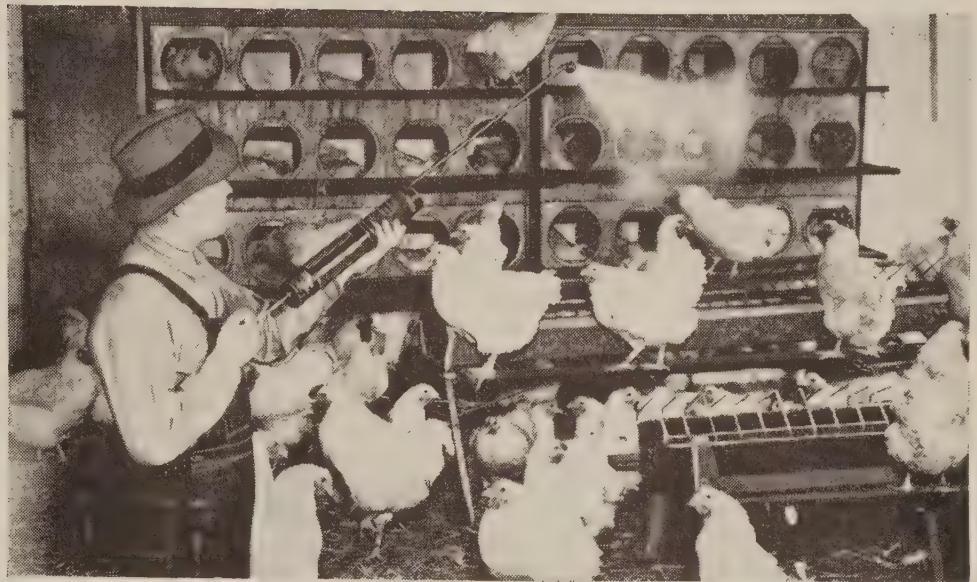
PETUNIA, Glow

HUDSON POULTRY EQUIPMENT

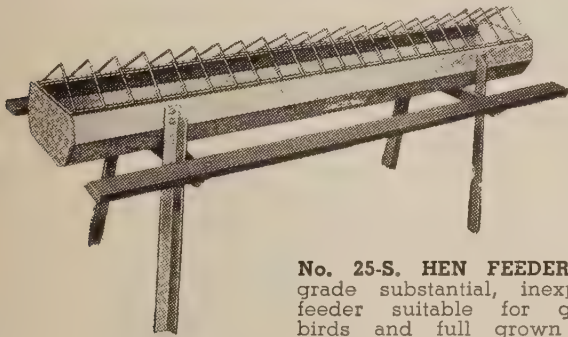
ALL PRICES F.O.B. MEDFORD

Come in and get acquainted with our complete line of poultry equipment. We carry the full line of HUDSON products including brooders, feeders, waterers and nests—also the best items of other famous lines. You can improve your returns from poultry by getting quality equipment from MONARCH year in and year out.

MONARCH for all POULTRY EQUIPMENT

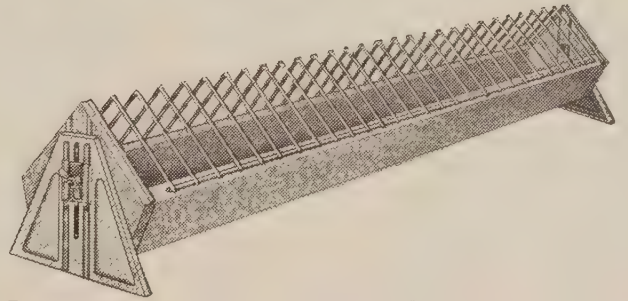


No. 4872 "LECTRIC-HEN" BROODER. Two powerful fully enclosed heating elements provide plenty of heat throughout the length of the brooder. Automatic temperature control. Your desired temperature is maintained by a positive thermostat control. Switch is bakelite sealed, protected from dust and moisture. No radio interference. Heavy insulation. Insulation is moisture resisting and helps reflect heat rays downward into brooding area. Handy inspection door. Plenty of room inside. Adjustable legs allow extra head room as chicks grow. Shipped partly set up in carton, complete direction for setting up. Plugs into 110-120 volt A. C. socket. Complete, ready to go. 500 chick capacity. 1100 watts. 48"x72". Weight 92 lbs. **\$49.50.**

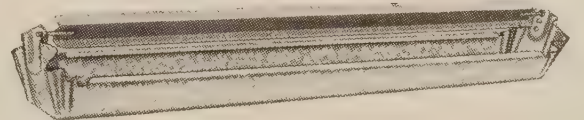


No. 25-S. HEN FEEDER. High grade substantial, inexpensive feeder suitable for growing birds and full grown stock.

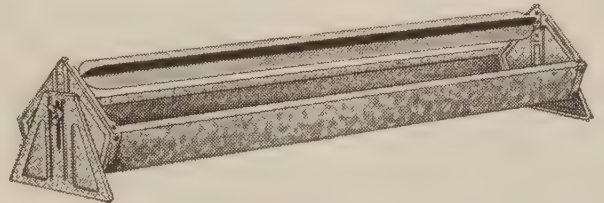
Handles dry mash, grain, shells, grit. Easy to keep clean—easy for hens to clean up feed. Convenient hinged grill. Stiff angle legs are cross-braced to strengthen. Perches mite and water-proof, 16 inches off floor. Plenty of range space for hens below. 5 ft. long. Trough 9 in. wide, 4 $\frac{1}{8}$ in. deep. Holds 40 lbs. dry mash. Serves 60 hens. Weight 25 lbs. **\$6.95.**



No. 748 BROILER FEEDER. Chicks two weeks of age until finished broilers. Raise stands as chicks grow. Extra large capacity steel trough 6 $\frac{1}{2}$ in. top width, 3 in. depth, 1 in. feed saving lip, no rough edges. Hinged grill, wires spaced 1 $\frac{1}{8}$ in. on center. Welded ends. Weight 15 lbs. **\$2.55.**



No. 224 CHICK FEEDER. Die formed from heavy galvanized steel. Trough 1 $\frac{3}{4}$ in. deep; 2 $\frac{5}{8}$ in. bottom width, 4 $\frac{1}{2}$ in. top width; feed-saving lip. Reel floats in either of two positions on shouldered reel pins. Prevents injured chick toes. 24 in. Weight 2 lbs. **50c each.**



No. 6360 CHICK FEEDER. Stands permit quick adjustment of feeder as chicks grow. 4-blade red enameled reel floats on shouldered reel pins. Adjusts to three convenient positions according to chick size. Welded ends. 2 in. deep, 4 in. top width, 3 in. bottom width. Length 36 in. Weight 4 lbs. **\$1.15.**

FLOAT VALVE No. 168.

Automatically regulates flow of water into a drinking pan or trough. Made of brass. Float and arm may be raised while pan is removed for cleaning. May be used with any type crock, pan or trough. Weight 1 pound. Each **\$1.35.**



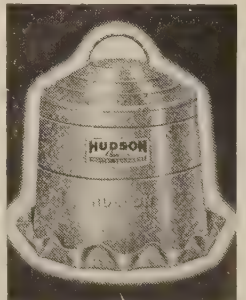
HUDSON DOUBLE WALL FOUNT No. K5

This fountain is a large capacity, inexpensive, yet substantial piece of merchandise. All-brass self-closing valve holds water in tank when jacket is removed for filling. Convenient inside handle for carrying full of water. Capacity 5 gallons. Weight 12 lbs. Each **\$4.20, F.O.B. Medford.**



No. A-8 FOUNTAIN. A handy-fill chick

fountain equipped with a snap-on cupped pan. This provides for more drinking space. Chicks do not get wet. The fount is inverted for filling. Can be carried when full without spilling. Capacity 2 gals. Weight 5 lbs. **\$1.45, F.O.B. Medford.**



HOW? WHEN? WHERE? WHY? . . . in Plant Feeding

As every gardener knows, good seed alone can't make a successful garden. No matter how good the seed, it needs proper feeding. Like any living thing, it must be nourished.

As seedsmen, we do everything in our power to bring you the finest of seeds. We select seeds with the right heritage, with the inborn qualities that are needed to win out in the battle every growing thing must fight.

But once our good seed is in your hands, the rest is up to you! So—in your plans to get the best possible results from our good seed, consider carefully the information on plant feeding which we give you here.

Actually, plant feeding nowadays is a rather simple, easy job. While plants need many different elements of food for best growth, all these elements can be provided by one complete balanced plant food such as Vigoro. Without odor or muss, the modern balanced plant food takes care of all the usual plant needs of the garden—and does it inexpensively.

As to the questions of "how, when, where and why"—most of the information you need can be told in a few words. The basic routine of plant feeding for the home garden and lawn is this:

For LAWNS:

Follow these 3 steps . . .

1. Check to see that grass is dry!
2. Apply evenly 4 pounds of complete plant food per 100 feet of area, either with a spreader or by hand.
3. Soak the plant food into the ground immediately after applying.

If water is not available merely work the plant food off blades of grass with back of rake. NOTE: If plant food is applied early, before growth starts, steps 1 and 3 do not apply. Early thaws and spring rains work the plant food into the soil.

For FLOWERS, VEGETABLES, BERRIES . . .

Apply complete plant food at the rate of 4 pounds per 100 square feet of area before seeding or setting plants. For established perennials apply around plants or along both sides of row early in Spring and at six to eight week intervals.

For TREES . . .

Make a series of holes 12 to 18 inches deep with a 2" soil auger or a pointed stick under the drip of the branches. Figure the plant food need per tree by measuring diameter four feet from the ground and allowing 3 pounds of complete plant food per inch of diameter. Fill holes with a

mixture of half plant food and half soil or sand.

* * *

As to your choice of plant food:

We recommend VIGORO because of its unexcelled balance and its long record of unfailing reliability.

New gardening aids by the makers of Vigoro

Gardeners in our area are getting a lot of help from two other gardening aids now presented by Swift & Company, the makers of Vigoro.

These new essentials are EndoPest and EndoWeed.

EndoPest provides the wide range of protection most gardens need against chewing insects, sucking insects and fungus disease. It comes ready to use in a patented dust gun package. Also available in large economical packages for use in standard dust guns.

EndoWeed is improved selective lawn weed killer. It kills over 100 weeds, roots and all. And it is easy to apply with the new EndoWeed Side Spray that applies diluted EndoWeed to the side while you walk. No pumping . . . no wet feet. Ask us about these valuable gardening aids. You'll find them a real help in making your gardening easier—and more successful.

VIGORO . . . complete, balanced plant food

Develops humus in lawn soil!

Vigoro helps develop large root systems. Each year as part of the old roots decay, humus (organic matter) forms in the soil . . . dark, fertile! Your soil becomes more capable of sustaining your lawn through every season . . . a better storehouse for moisture and plant food.



Nourishes the whole plant!

Vigoro extends its benefits to blooms, stems, and roots. Gives good color to foliage—promotes quick growth and makes roots strong. It also strengthens stems, increases size and heightens color of blooms—promotes better general health of plants.



GARDEN SUPPLIES

If it's results you're after . . . and if you want to have some fun while you're at it . . . then you'll need some of the time-and-labor savers that we have here, ready and waiting for you.

Our line-up of garden supply items is not only complete, but highly dependable—every one designed and built by a manufacturer who has earned the confidence of experienced gardeners.

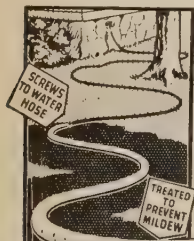
Remember, it's a regular part of our job to lighten the labor load for our customers . . . to help them in every way we can.

MONARCH IS GARDEN SUPPLY HEADQUARTERS

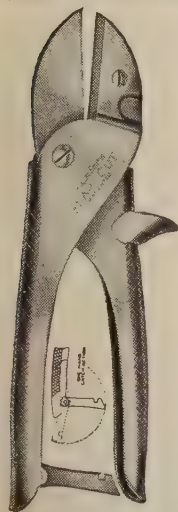
Water where you want it

Made of canvas—scientifically treated to resist mildew. Puts moisture down into the soil. Avoids water waste. SOIL-SOAKER enables you to put water exactly where you want it. Excellent for irrigating around plants where

moisture is apt to damage foliage. Two lengths available, 18 ft. \$2.35, 30 ft. \$3.60, postpaid.



SOIL-SOAKER



SNAP-CUT

Out-Cuts all others

Orchardists and gardeners everywhere recognize "SNAP-CUT" as the most efficient pruner on the market. A new cutting principle makes for easier cutting. Small in size, light in weight. Even a child can handle this easy cutting pruning shear. Each, postpaid \$2.40. FREE book.

Place HOTKAPS — patented paper hot-houses — over seeds or plants. Complete protection from destructive FROSTS, STORMS AND INSECTS. Ripen crops 3 weeks earlier; increase yield 18% to 51%. Maintain perfect mulch. Millions used by successful growers every season. Easy to set. 25 HOTKAPS for 60c. 250 for \$4.15 setter free; 1,000 for \$12.00.

Germaco

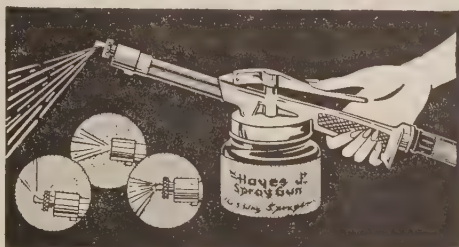
HOTKAPS

A GERMACO PRODUCT

RAIN can't harm



INSECTS can't touch



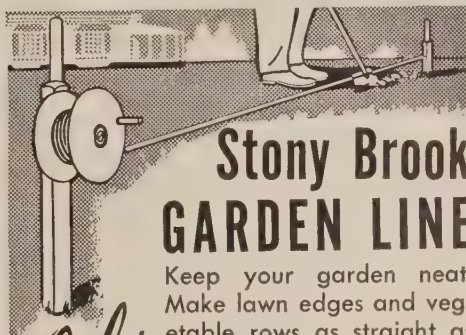
HAYES JR. SPRAY GUN

Just attach HAYES JR. to garden hose, turn on the hydrant, lightly press the convenient lever—and HAYES JR. sprays! Gives efficient performance of heavy, expensive equipment. No moving parts to wear out or break—insures long life and satisfactory service. Price only \$6.95.

HAYES 25 TO 1 PROPORTIONS

To apply liquid and soluble fertilizers, lawn moth solutions, insecticides and fungicides, etc.

only \$1.95



Stony Brook GARDEN LINE

Keep your garden neat. Make lawn edges and vegetable rows as straight as the proverbial die. Rust-proof, aluminum spool with 150 feet of line on strong, waterproofed, brightly lacquered stakes. A handy garden help and an ideal gift for a gardener friend.

Only \$1.25

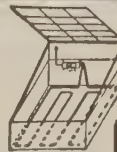
'GRO-QUICK' ELECTRIC SEED BED HEATER

- "ROOT CUTTINGS IN 6 DAYS"
- "SEED UP IN 30 HOURS"
- "CUT GERMINATION TIME BY 2/3"
- "TRANSPLANT 2 WEEKS SOONER"

These enthusiastic reports from users tell what GRO-QUICK SOIL HEATING CABLE will do for you. Send today for testimonials and free, new instr. sheet with plans. For hotbeds—cold frames—unheated greenhouses—plant benches—for early plant starting in open ground. Operates from household current.

JUNIOR 40' Cable, 200 watt with thermostat for 3x6 bed or 20 sq. ft. . . . \$5.35

SENIOR 80' Cable, 400 watt with thermostat for 6x6 bed or 40 sq. ft. . . . \$6.95



Protect Your Hands with these Soft Leather

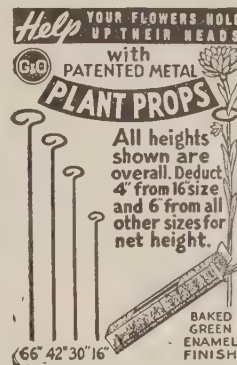
GLOVES



So easy to wear, yet give you All-Leather DIRT-PROOF protection. Durable, economical, washable. Sizes: Ladies' small, med., large; Men's small, med., large.

Eazy Wear Price \$1.35
GLOVES pr. post-paid.

METAL PLANT PROPS



Help YOUR FLOWERS HOLD UP THEIR HEADS with PATENTED METAL PLANT PROPS. All heights shown are overall. Deduct 4" from 16" size and 6" from all other sizes for net height. BAKED GREEN ENAMEL FINISH. 66" 42" 30" 16"

- (a) Just hook 'em in—the job's done.
- (b) Support Flowers, Vegetables better.
- (c) Termite and rot proof. No Rag Ties.
- (d) Baked in garden green enamel.
- (e) So simple a child can place.
- (f) Processed stiff steel of varying thicknesses to suit required support.

16" size, 55c doz.; 30" size, \$1.10 doz.; 42", \$1.35 doz.; 66", \$2.25 doz.; 78", \$3.30 doz.

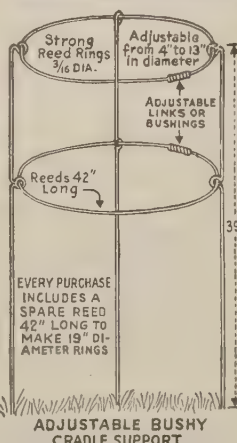
FENCE RODS

Handy 1/4" diameter sturdy "jiggers" to protect, keep dogs and children from damaging plants, etc. Run rope or wire through loops and "cradle up" bushy plants. Green enameled. Price \$1.50 per dozen.

WICKETS

METAL 21" high 13" wide. 4 ft. end to end, 1/4" diameter, 21" high by 13" opening. Green enameled. No prongs to tear or scratch. Keeps traffic away. Markers for sidewalk lawns. 50 different practical garden uses. Price \$1.75 per dozen.

ADJUSTABLE BUSHY CRADLE SUPPORT

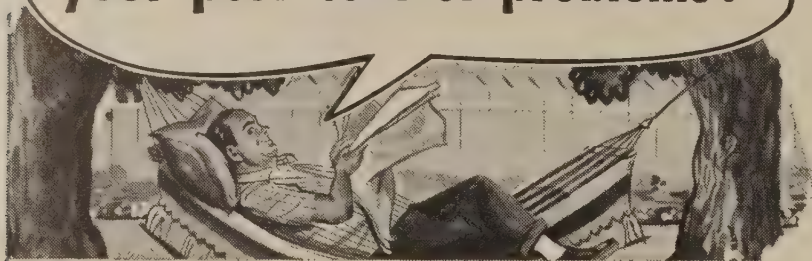


Support for Peonies, "Mums," Tomatoes, Shrubs, etc., adjustable from 4" to 19" diameter. Double rings of thick rattan reeds. Lasts for 5 years. 3 sturdy steel green enameled 39" high rods with double eyes. Will prove a revelation to old time gardeners. Parts assembled in 2 minutes. So simple for storing. Reeds can't cut or burn stems. Price, complete in shipping carton, 65c.

EVERY PURCHASE INCLUDES A SPARE REED 42" LONG TO MAKE 19" DIAMETER RINGS

ADJUSTABLE BUSHY CRADLE SUPPORT

Let **ORTHO** simplify your pest control problems!



PEST-B-GON Insect Spray. Contains 20% DDT. Kills Beetles, Worms, Thrips, Ants, Leafhoppers; also Houseflies (as screen paint), Mosquitoes, Fleas. 4-oz. Bottle, 65¢. 1 Pint, \$2.00

BOTANO Garden Dust. For use against many insects and diseases. Includes Rotenone and Pyrethrum. One of the safest multi-purpose dusts that can be used. 10-oz. size, in handy garden duster, 60¢

A Bouquet and a Brickbat for Man's Best Friend...

Brickbat: SCRAM Dog Repellent, to keep dogs away from shrubs, flowers, lawns, store fronts, porches, etc. Easy to use. Does not harm animals. 8-oz. Shaker, 50¢

Bouquet: ORTHO-PET Flea Powder is a potent flea killer—one or two treatments a month do the trick! Use on cats, too.

1 1/2-oz. Puffer Package, 35¢



Ask for a free copy of our complete pest control chart

SABADUSTO

Kills Squash Bugs

For the first time there has finally come to light an effective destroyer of this pernicious pest. You merely dust the powder on the leaves and the soil surrounding the plant . . . Presto . . . they disappear, once and for all.

Pound Pkg., Postpaid, \$1.35.

NAPHTHALENE

Kills Soil Pests

Diamond Quality Naphthalene Flakes are used extensively throughout the west for many soil pests. Highly recommended by the U. S. Department of Agriculture for the control of Wireworms. One pound worked into 50 square feet of ground will give from 97 to 100% kill.

Also recommended for the control of Gladiolus Thrip. One ounce of flakes to every 100 bulbs.

1 1/2 pounds \$.45
5 pounds 1.40

Postage paid.



Protect your garden with ORTHO pest control products...

BUG-GETA PELLETS. For use against Principal Foraging Pests.

Slugs, Snails, Cutworms, Earwigs, Grasshoppers, Strawberry Root Weevil. Baiting against these pests is easy with the new BUG-GETA PELLETS Compressed Baits. 5000 baits in a 2-pound carton.

12-oz. Carton, 35¢ 2-lb. Carton, 75¢
5-lb. Carton, \$1.50 25-lb. Bag, \$5.60

ORTHO Rose Spray Kil. Special Combination Offer. Contains 2-oz. bottle "EXTRAX" for Aphis and other insects and 2-oz. bottle "GREENOL" to prevent certain Powdery Mildews. Makes 12 gallons spray. Used for vegetables, too.....Each Kit, \$1.00

Get outstanding pest control with this new multi-purpose garden dust!

BOTANO Deluxe Improved: contains Zinc and Iron Carbamates, Gamma Isomer of Benzene Hexachloride, Dianysl Trichloroethane.

8-oz. Duster, 75¢ 2-lb., \$1.50

TRIOX (A Weed Killer). Poisons soil and prevents weeds from growing. Use on driveways, walks, and other places where no vegetation is wanted.

1-Qt. Can, \$1.00 1-Gal. Can, \$3.50



CALIFORNIA
SPRAY-CHEMICAL
CORP.

Richmond, Calif. - Elizabeth, N.J.



THE COMPLETE DORMANT SPRAY

Scalecide cleans up overwintering insects on fruit trees, shade trees, shrubs and evergreens. Spray before growth starts in Spring. Qt. cans 85¢; Gal. cans \$2.00.

Kill More Kinds of Insects

D-X Spray contains rotenone, pyrethrum and DDT for the best protection the garden has ever had. Spray flowers, fruits, and vegetables. Dilutes 1 to 400, economical. 1 1/2 oz. 40¢; 1/2 pint can \$1.50.



the maker of **VIGORO** presents **EndoPest** 1 WAY GARDEN DEFENSE

Controls chewing and sucking insects and many fungus diseases... it's all the protection most gardens need!

Improved selective lawn weed killer. Kills over 100 weeds, roots and all. Easy to use with the new EndoWeed Side Spray

Amazing Relief for TORTURED Dogs and Cats

SKIN ITCH: Don't be too quick to blame fleas, mange, diet, if pets itch—scratch continually. 2 to 1 it's "FUNGITCH," fungus infection discovered by noted veterinarian, Dr. A. C. Merrick. Much like athlete's foot, it itches painfully—soon develops dandruff-like scales or mouldy-smelling brownish-edged sores around tail, on paws, back or underbody. Dr. Merrick's SULFODENE applied externally stops the itching in minutes—clears up scales and sores in a few days. Generous treatment \$1.00.

EAR CANKER: If pet repeatedly rubs ear on floor, etc., shakes head or holds it in stiff, unnatural way, examine ears carefully. If hot—sensitive—musty-smelling, you know it's ear canker (otitis). Apply Dr. Merrick's EAR CANKER Creme at once—snip tip off handy gelatin capsule—squeeze Cream into each ear. It contains wonder-drug, Tyrothricin. Works swiftly to relieve pain, remove causes and promote healing of ear canker. All 10 capsules in package seldom needed. Only \$2.00 per package.

MONARCH SEED AND FEED CO.

Spray with
BLACK LEAF 40



Aphids (plant lice), leafhoppers, leaf miners, mealy bugs, lace bugs, most thrips, young sucking bugs and similar insects can be controlled.

An ounce makes 6 gallons of spray effective on aphids. Full directions with package—A quick, sure, economical control for these insect pests.

Just a little spread on roosts kills poultry lice and feather mites.

1 oz. Bottle, 36c; 5 oz. \$1.05; 1 lb. \$2.42; 2 lb. \$3.92; 5 lb. can \$7.40.

NEW CONTROL FOR SOIL INSECTS and Fairy Ring

CX, the New compound of Hexachlorocyclohexane and Carco Spray, takes care of an amazing range of pests, including some that no other insecticide handles as well. CX is a sure control for root maggots and other soil insects . . . eradicates "Fairy Ring" and many other insects. Also a perfect defense against moss scale and lichens, making a perfect dormant spray for shrubs and trees. Shrubs drenched with CX in late winter or early spring are often completely rejuvenated. Tests checked by competent entomologists fully support these statements. CX is easy to use, tool! Just a sprinkling can or even a cup does the job, if no sprayer is available. Quart (makes 25 gal. of spray), \$1.95; Gallon, \$4.95. Larger quantities, on request.

CX



STANLEY'S CROW REPELLENT

Protects Seed Corn

from Crows, Pheasants, Blackbirds, Larks and all other corn-pulling birds and animal pests, such as Moles, Gophers, Woodchucks, Squirrels, etc.

1/2 Pint	1 Pint	1 Quart
—enough for—	—enough for—	—enough for—
1 bu. seed	2 bu. seed	4 bu. seed
60c	\$1.00	\$1.75

Manufactured only by CEDAR HILL FORMULAE CO., New Britain, Conn.

Consult
MONARCH
for insecticides
and pest controls

The local seedsman knows local conditions. Our complete stock of pest controls covers all your needs.

Stop Garden Bugs

This amazing new tool for home gardeners protects your garden against most insects and fungus diseases. Gun is loaded with 2 lbs. dust containing DDT, Rotenone, sulfur, etc.



BUG BLASTER

PEST EXTERMINATORS and TRAPS

MACABEE GOPHER TRAP



There are more Macabee traps sold than all other makes combined. They are inexpensive and very efficient. Designed for exterminating the wily Pocket Gopher. Weight 1/2 pound. Price, 45c each, postpaid.

OUT-O-SIGHT MOLE TRAP

Absolutely reliable. Directions for setting and full directions of the mole's habits furnished with each trap. Heavy powerful springs, malleable iron jaws. Teeth designed so as not to injure the hide. Height 8 1/2 inches. Spread of jaws 2 3/4 ins. Weight each, 1 1/2 lbs.



Price, \$2.50, postpaid.

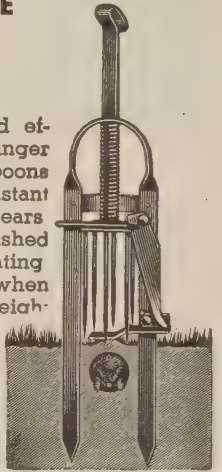
Spells finish to Gophers, moles, mice, rats all burrowing rodents. Open hole in tunnel with sharp stick, drop in GO-FER-GAS Crystals, pour cup of water over Crystals, cover immediately. Repeat over infested area.

24 oz. can 60c, 6 lb. can \$1.60.

GO-FER-GAS Crystals

VICTOR MOLE TRAP
Standard
Spear Type

A sure, sensitive, and effective spear, or plunger type trap that harpoons the mole, causing instant death. Six prong Spears Trap attractively finished with rust resisting coating. Extreme length when sprung 16 3/4 in. Net weight per trap 1 lb., 1 Packed one trap in shipping carton with card of instructions for setting and using. Shipping weight 2 3/4 lbs. each.



Each, Postpaid, \$1.75

ONEIDA VICTOR GAME TRAP

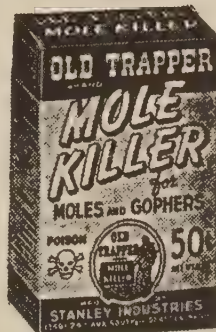
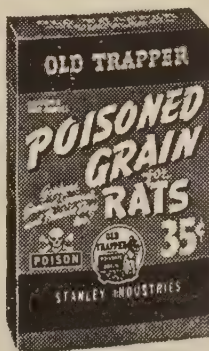


The most popular and efficient trap on the market. Expert workmanship makes every Oneida Victor a precision trap—strong and durable. So constructed that every part works perfectly. Because of their construction they do not rust tight or clog with dirt.

Size "0" for Rats, Gophers, Weasel, each, prepaid, 45c.
Size "1" for Muskrat, Skunk, Mink, each, prepaid, 45c.

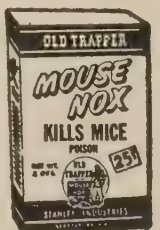
OLD TRAPPER MOLE KILLER

This troublesome garden pest can be controlled quickly and easily with Old Trapper Mole Killer. Made especially for our Western moles. Gives certain results when used as per complete directions on the package. We have sold Old Trapper Mole Killer for three years and have found it truly effective against these pests. 2-oz. package, sufficient for 50 moles, 50c. Cannot be mailed as it is a poison.



OLD TRAPPER POISONED GRAIN

For rats, gophers and ground squirrels, Old Trapper Poisoned Grain is our recommendation. The oats, wheat and barley are highly impregnated and made especially attractive to rodents. Field mice succumb to it, too! Large 9-oz. package, 40c. Cannot be mailed as it is a poison.



OLD TRAPPER MOUSE NOX

Rid your premises of mice this quick and easy way. Mice love Mouse Nox. A few grains does the job. It is a positive destroyer of mice. 2-oz. package, 25c. Poison, cannot be mailed.



OLD TRAPPER RAT KRUNCHES

Deadly to rats! Old Trapper Rat Krunches are tasty pellets, ready to use. They are safe, too, because they kill nothing but rats. One of the most effective rat baits made. Non-poisonous to livestock, poultry or human beings. 75 baits in package, 25c (35c postpaid). Larger package, 50c (60c postpaid).

MONARCH SEED AND FEED CO.

HORMONE PREPARATIONS. .for better yields,

ROOTONE

Reg. U. S. Pat. Off.

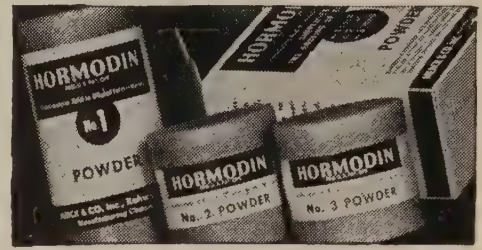
The Plant Hormone Powder

This nationally known hormone powder makes cuttings root faster and more successfully. It stimulates seed germination so that rooting is heavier and you get a better stand of seedlings. Endorsed and used by leading growers everywhere. Trial packet 25c—2 oz. jar \$1.00—1 lb. can \$5.00.

FRUITONE

REG. U. S. PAT. OFF.

FRUITONE, the hormone spray for stopping premature drop of fruit, flowers, and leaves. Sprayed on flowers of tomatoes or beans, it produces better set, larger crop, and high percentage of seedless tomatoes. Makes Christmas greens hold their leaves longer. 2/5-ounce packet, 25c. 2-ounce package, \$1.00. 12-ounce can, \$5.



ROOT CUTTINGS WITH HORMODIN POWDER

Reg. U. S. Pat. Off.

This Hormone Powder produces better roots—faster! Simply dip moistened stems in Hormodin Powder and place in usual propagating medium. For house, garden, and greenhouse plants use Hormodin Powder No. 1; also available as Powder No. 2 for woody types, and Powder No. 3 for evergreens.



FIX

A Hormone bloom-set for seedless tomatoes

FIX "sets" blossoms as they appear, even the fragile early blooms. This means your tomato crop will be:

- ★ 20% to 30% greater
- ★ Earlier, larger, firmer
- ★ More flavorful
- ★ Seedless, more edible

Spray FIX early and late, as plants continue to flower. May also be used for cucumbers, melons, and squash. FIX sets holly and other berries.

\$1 for 100 tablets—makes 100 QUARTS
25c for 20 tablets—makes 20 QUARTS
Also larger sizes.

TRANSPLANTONE

Reduces shock and wilt when plants are moved. Produces earlier maturity on tomatoes, lettuce, celery, peppers, tobacco and cabbage. Used on plants, shrubs and trees it encourages growth and bloom. One teaspoonful of powder makes 10 gallons of solution. Trial packet 25c—1 oz. can 50c—3 oz. can \$1.00—1 lb. can \$4.00.

GARDEX BOW-PULL HOE

No. 120

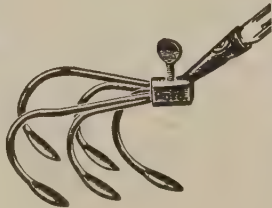
An exceptionally fine hoe for use in thinning, hoeing and weeding among vegetables, tobacco, cotton and similar crops. There is no better tool for use under shrubberies. The cutting edge, turned well towards you, makes it possible to apply the GARDEX easy pulling principle, thus saving time, labor and backaches. Width 7".

PRICE (at Our Store) \$1.50

PRICE, Postpaid \$1.75



No. 120



No. 1605



No. 1523

GARDEX CULTIVATOR WEEDER

No. 1523

Every gardener should have this combination tool. The weeding blade cuts off all weeds quickly and easily. The three-prong cultivator mulches the soil, getting in and at places otherwise hard to reach. Weeding blade is 4 inches wide while cultivator prongs cover 4 1/2" width. Once you try GARDEX Tools you'll never be without them.

PRICE (at Our Store) \$1.50

PRICE, Postpaid \$1.75

GARDEX 7 TOOLS IN ONE

No. 1605

No wrench needed to change to a 1-2-3-4 or 5 prong cultivator. A simple turn of wing screw does the trick. Only 4 parts. No rust—No bolts—No Nuts to worry over. A child can make changes in a few seconds. It's the ladies' favorite. For work between rows, straddle rows or narrow places. Ideal for hot beds or green houses.

PRICE, (at Our Store) \$1.75

PRICE, Postpaid \$2.05

THE "ALL-PURPOSE" GARDEN HOE for Cultivating, Weeding and Mulching

Try this new, high speed light weight garden tool. So easy to handle, so much lighter, faster and better—you'll never go back to the ordinary hoe! Enthusiastic women gardeners claim less fatigue, better results.

You'll find it's fun to flick Dandelion and Plantain from the turf, or mulch around evergreens, shrubs, perennials.

Goose-neck shank permits close cultivation of prized perennials. Amazingly efficient for mulching, cultivating, weeding your garden. Weighs only 1 1/2 lbs., yet stronger than other garden hoes. Order today—if not delighted, return it for money back.

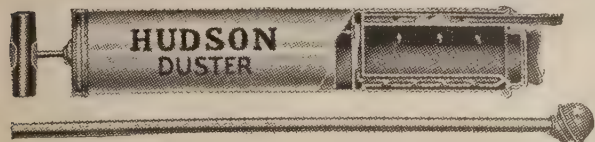
Price \$1.95, Postpaid.



HUDSON SPRAYERS

A sprayer for every purpose

Prices F. O. B. Medford, Oregon



No. 765 ADMIRAL DUSTER. Discharge ranges from a very fine to a heavy cloud. Uniform mixture of carrier and concentrate through the entire application. Economical application adapts it for higher priced powder-insecticides such as Rotenone, Derris Root, Pyrethrum, etc. Special plunger provides powerful air-blast which drives through powder agitating it thoroughly. 2 3/4 in. diameter, 9 1/2-in. stroke. Powder reservoir 2 3/4 x 6 inches. Large filler screw cap permits easy filling or cleaning. 24-in. extension tube with adjustable nozzle for straight or angle discharge. Weight 3 lbs. **\$1.85, F.O.B. Medford.**

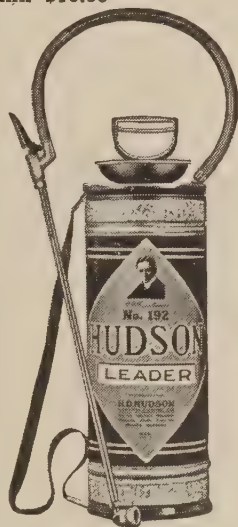


No. 661 SIGNAL DUSTER. A practical small duster for the small gardener. 1 3/4 in. diameter, 3 in. length. Large, easily removed filler cap. Air valve prevents powder from getting back into pump. Discharge tube facilitates driving the powder into cracks and crevices. Weight 1 lb. **55c each, F.O.B. Medford.**

HUDSON 210-G "PERFECTION" SPRAYER

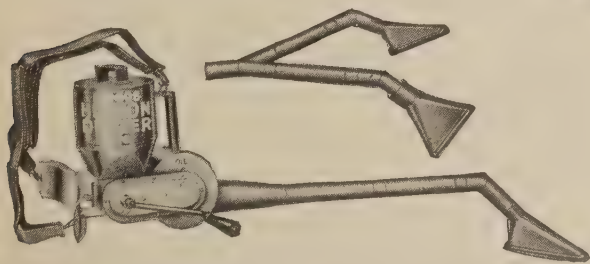
—Easy fill, open top makes for ease in filling and cleaning. "Perfection" is the last word in tank sprayers. When the pump and top assembly is locked in position it is there to stay. So is the pressure in the inside of the tank. Four points of contact insure a positive seal. Equipped with an ingenious eccentric type lock to provide quick, secure locking, or safe, easy release. Made either in galvanized or copper. Shipping weight 13 pounds. Four gal. capacity.

210-G—Galvanized tank \$13.50



HUDSON 192-G "LEADER" SPRAYER—

Substantially built and will take care of maximum wants around the home garden. While the quality of "Perfection" will not be found in "Leader" you'll get much valuable service from it. Capacity 3 1/2 gals., shipping weight 10 lbs. **Price each, \$9.80.**



HUDSON "ROTO-POWER" DUSTER No. 608—

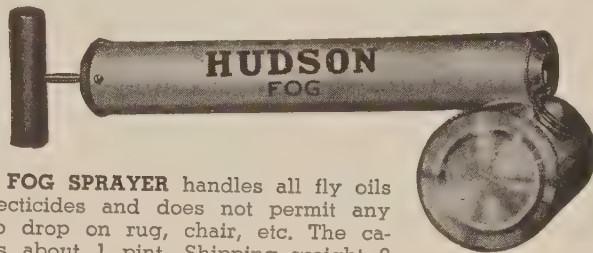
We are proud to present the new "Roto-Power". Miracle Duster! Built with new super-power—every atom is delivered in a fine, floating dust. The dust flows into the air stream and is whirled through the Roto-Power fan for finest break-up. Twin Agitators, no pressure back-up and no clogging, long wear, economy and comfort. Dust volume control in the "Roto-Power" duster gives you efficiency seldom attained in a large type duster. Discharge equipment, 2 nozzles, wye connection and four 15-inch telescoping tubes. Can be used with one or two nozzles for single or double rows. Shipping weight 15 pounds.

No. 608—"Roto-Power" Duster, largest size.....\$18.25



HUDSON "CONTINUOUS" SPRAYER No.

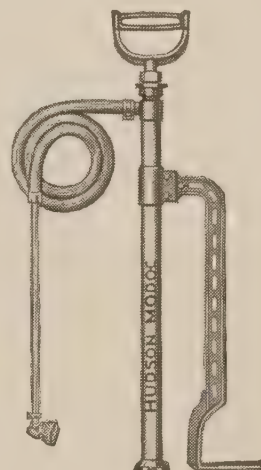
432—An exceptionally sturdy unit. Pump passes directly through the top of the tank and is securely soldered, preventing any possibility of parts getting out of alignment. Produces a very finely divided, continuous spray without spitting or streaming. Fitted with double nozzles for particular garden work. Capacity 1 quart, shipping weight 3 lbs. **Price each, \$1.35.**



No. 303 FOG SPRAYER handles all fly oils and insecticides and does not permit any liquid to drop on rug, chair, etc. The capacity is about 1 pint. Shipping weight 2 lbs. **Price each, 60c.**

No. 440 HANDY SPRAYER—The improved Handy is a more efficient sprayer than ever before. Large container and big screw cap add to its usefulness as well as convenience. Does a splendid job around the yard on flowers and shrubs, in the poultry house, dairy barn. An unusual value in a quart tin sprayer at moderate cost. Weight 1 lb. **80c, F.O.B. Medford.**

No. 122 MODOC SPRAYER—A sturdy sprayer for spraying fruit trees, garden truck, chicken houses, etc. Used with whitewash, cold water paints, insecticides. Develops 150-pound pressure. Can be used with bucket or small tank. Produces any type of spray from fog to solid stream. Cylinder 19 in. long. Air chamber 3/4 x 19 in., 3 ft. of high pressure spray hose; 2-foot extension rod; all purpose angle spray nozzle adjustable from spray to solid stream. Weight 7 lbs. **\$7.90.**



**MONARCH CARRIES
A COMPLETE LINE
OF SPRAYERS & DUSTERS**

COMBINATION FERTILIZER AND SEED SOWER

This Dual Purpose Machine is designed with extra heavy gears and brass bushed bearings for hard service and long wear.

It is of special value to farmers who wish to apply fertilizer or seed early in spring when the soil is still wet. Can be used anywhere a man can walk, since it is carried by a strap over the shoulder. Especially useful on steep, rough, irregular grass lands. Then, too, the proper time for such fertilization comes so early that the soil is usually too wet for the use of a team or tractor.

The Combination Sower broadcasts all kinds of seed, such as clover, timothy, millet, sudan grass, alfalfa, wheat, etc., perfectly in desired amount per acre.

Price \$4.90.

Shipping weight each 7 lbs. **\$5.15, postage paid.**



PLANT FOODS and Plant Feeding Aids

Miller's GARDEN COMPOST MAKER

Converts rubbish into fertilizer
Uses grass clippings, leaves, etc.

A 5-lb. package of Miller's Garden Compost Maker will make several hundred pounds of high-grade, organic humus fertilizer by converting your garden refuse into a rich organic humus compost.

5 lbs. 80c

25 lbs. \$2.85

Inoculate all Legume Seeds with NITRAGIN When ordering always state name of seed

ALFALFA
Sweet, Bur, Hubam Clovers
Size Retail
1 bu. ea.\$.50
2½ bu. ea. 1.00

CLOVERS
Medium & Mammoth
Red, Alsike, Crimson &
White Clovers
1 bu. ea.\$.50
2½ bu. ea. 1.00

PEAS (All Varieties)
VETCHES (All Varieties)
100 lb. size (Inoculates up
to 100 lbs.) ea.\$.50
1200 lb. size ea. 5.70
(12-100 lb. size cans)

**BEANS—Navy, Pinto,
Wax, String, Kidney, Gr.
Northern**
1 bu. ea.\$.35

LESPEDEZA
Hulled or Unhulled
100 lb. size (Inoculates up
to 100 lbs. seed)....\$.50

**PEANUTS, LIMA BEANS,
COW PEAS**
Size Retail
Small (Inoculates up to
120 lbs. seed).....\$.30
5 bu. ea.55
25 bu. (one can) ea. 2.50
30 bu. (one ctn.) ea. 3.25
(Contains 6-5 bu. cans)

SOYBEANS (All Varieties)
Small (Inoculates up to
120 lbs. seed)\$.30
5 bu. ea.55
25 bu. (one can) ea. 2.50
30 bu. (one ctn.) ea. 3.25
(Contains 6-5 bu. cans)

LUPINES (All Varieties)
100 lb. size (Inoculates up
to 100 lbs. seed) ea. \$.50

GARDEN SIZE
Garden Peas and Beans
Sweet Peas, Lupines and
Edible Soybeans
Enough for 8 lbs. seed
Retail Price 10c each.

We use and recommend for
seedlings, transplanting and
growing

PLANT CHEM

Safe, odorless and easy to
handle, this is a concentrated
plant food containing all nutri-
ents, trace elements and
growth hormone. A scant
spoonful makes a full gallon
of rich plant food.

PLANT-CHEM

25c size makes 16 gal.
\$ 1.00 size makes 100 gal.
2.00 size makes 400 gal.
15.00 size makes 5000 gal.

**POUR IT ON—
WATCH 'EM GROW**

NEW LIFE FOR POTTED PLANTS, GARDEN FLOWERS & VEGETABLES

PLANTABBS put new life and vigor into
all plants, both indoor and out. You can
have beautiful ferns, geraniums, begonias,
ivy, *African violets*, gardenias simply by
feeding them **PLANTABBS**.

VEGETABLES, too, grow vigorously—
produce big, early yields when given an
extra boost by these **PLANT FOOD** tab-
lets. Easy to use. Clean, white, odorless—
will not burn tender plants. *Results or money
back.* Four sizes—25c, 50c, \$1, \$3.50.



Grows bigger, better
house plants, flowers,
vegetables, lawns, and
trees in poorest soil—
even in sand, cinders or
water. **Results sure.**
Doesn't burn. Clean, odorless, soluble
powder. 1 oz. makes 6 gallons.

Retail
1 oz. pkt. (packed 72 to case) 10c
3 oz. can (packed 36 to case) 25c
7 oz. can (packed 24 to case) 50c
1 lb. can (packed 12 to case) \$ 1.00
10 lb. drum, makes 1000 gals. 8.00
25 lb. drum, makes 2500 gals. 15.00
50 lb. drum, makes 5000 gals. 25.00
100 lb. drum, makes 10,000 gals. 40.00



WEEDONE

TRADE MARK

The famous 2,4D weed-killer

Kills Poison Ivy, Poison Oak, Bindweed, Honey-
suckle, Dandelion, Plantain, many other noxious
weeds. Sprayed on leaves, it travels down and
kills internally, right out to the root tips. Sprayed
on lawns, it kills lawn weeds *without killing
grass.* Safe for humans and animals. Does not
hurt the soil or corrode spraying equipment.
Just mix with water and spray.

6-ounce can 75c covers 1,000 sq.ft.
Quart \$2.50 covers 5,000 sq.ft.
Gallon \$7.50 covers ½ acre

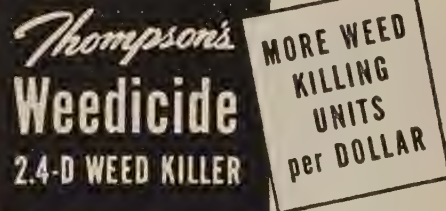
Larger Quantities on Request

WEEDUST 2.4D

in the ready-to-use can

Kill those here-and-there weeds in
your lawn with Weedust, 2.4D in
powder form. Just shake directly
from the can. No mixing or measur-
ing or spray gun needed.

Big can 75 cents
Enough for 1000 weeds



With Weedicide, you get more weed-
killing results per dollar! It is more con-
centrated, has a more dynamic wetting
agent, holds contact with plants longer.
Kills even such stubborn weeds as the
deep-rooted perennials, bindweed, etc.
Invaluable for lawns, vacant lots, golf
courses. Most economical 2,4D for farms.
**LIQUID—2 oz. 25c; 8 oz. \$1.00; 1 qt.
(¼ acre) \$1.75.**
**LIQUID CONCENTRATE—1 pt. (½ acre)
\$1.35; 1 qt., \$2.35; 1 gal. \$7.60.**
POWDER—8 oz. \$1.00; 1 lb. \$1.50.
Ask for prices and data on larger sizes.

WEED-NO-MORE

MAGIC WEED KILLER

- Destroys weeds—roots and all!
- You just SPRAY the lawn—
weeds and all!
- Is quick-acting—penetrates
quickly!
- Will not injure the soil!
- Is not poisonous to humans or
animals!
- Will not stain hands or clothing!
- Will not harm common lawn
grasses!
- WEED-NO-MORE is economical!
1 oz.-package treats the average
lawn, and in most cases one
treatment will do.
1 oz. (treats 1600 sq. ft.) \$1.00
Quart size (treats 6400 sq. ft.) \$2.98
F.O.B. Medford, Ore.



THE DEVIL'S OWN

IS YOUR OWN DOG
WHEN HIS SKIN'S AFIRE

IT'S ALL THE SAME TO HIM
whether it's agonizing, so-called

Summer Eczema or Dry Winter's Skin

It doesn't matter if his distress is caused by fungus in the grass or shrubbery, "hot spots," sores or chapped skin and dandruff scales. If he is in a mangy condition and "scratching his heart out," he only knows he's a tortured dog, he's pleading for help and it's time to **GIVE HIM FIRST AID WITH QUADINE**. Check the itching before it gets worse—act promptly to avoid further torment, protect against dangerous infection—with **QUADINE**.

EVEN IF IT'S NOT SO-CALLED "SUMMER ECZEMA" OR DRY WINTER ITCH—If only common fleas, lice or ticks are "setting him wild" **QUADINE** "gets rid" of them too—and with little effort on your part it keeps your dog clean and his hair gleaming.

ONE BOTTLE OF QUADINE IS SO GOOD FOR MANY THINGS

It is therefore most economical and convenient. So say kennel owners, professional handlers and individuals, who long have considered it indispensable for their dog's welfare, and appearance. Thousands have enthusiastically proclaimed its many virtues. Moreover . . .

QUADINE IS SAFE

It is not a poisonous powder to be shaken off and inhaled but a transparent emerald green liquid for external application—Its bright color and distinctive odor prevent danger of it getting into food without detection; also Quadine's harmless to humans if inhaled—so . . .

YOUR MIND CAN BE AT EASE

when **QUADINE'S** in the house—You needn't keep it under lock and key for fear it may be mistaken for something else. Yes, **QUADINE'S** safe and **QUADINE** satisfies or your money back.

For Sale by

ON WINTER DAYS



and throughout the year your meals are made palatable by the use of many flavors. At all times great varieties of foods and spices are at your beck and call to stimulate your appetite and contribute to your pleasure and your health.

Amongst these flavors and foods, since days of antiquity

Garlic has held high place

The Egyptians used it and Chinese cooking depended upon it. Can you imagine the state of mind of a temperamental French housewife or chef suddenly deprived of this product, so highly essential to the far-famed culinary art of their nation?

— Well —

DOGS ARE FOND OF GARLIC TOO

It has been used by leading Kennels and dog fanciers of England for over a century. It is rapidly gaining in favor throughout America. When you are "off your feed" you need help. If your appetite is jaded you require something to "pick it up". How about your faithful friend, your dog? — He adores you; the joy of his bark, the wag of his tail, every move he makes tells you so.

In its convenient form Allen's Liquid Garlic is just the thing to flavor his WAR-TIME food, especially in winter when he spends more time indoors and gets less exercise.

If his appetite begins to lag, just try a teaspoonful of Allen's Liquid Garlic in his rations once a day. Do this for a while and see how he responds.

Is your dog entitled to such treatment?

If you think so — ask your dealer for

ALLEN'S LIQUID GARLIC

or write to

ALLEN-CROWL COMPANY

317 Superior St. TOLEDO 3, OHIO



The Morning After A RAT-NIP Spree



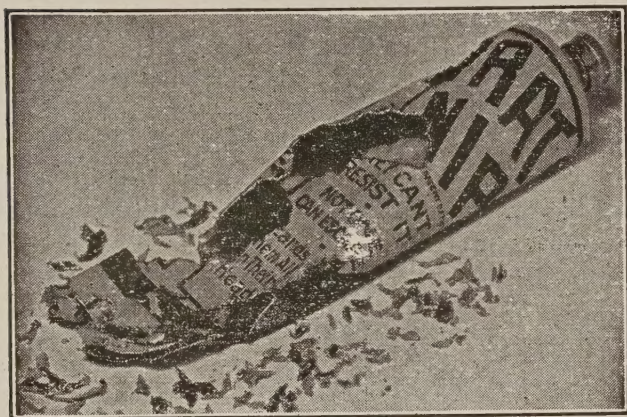
A Bushel
Of RATS

The picture shows one of the many bushels of rats killed with Rat-Nip when the City of Buffalo adopted it exclusively to kill off its rat population. It is estimated that within one week, millions of rats were destroyed. Read why RAT-NIP works so wonderfully.

MAKE THIS EXPERIMENT. Buy a small paper package of Catnip at your drug-store. Don't bother to unwrap it. Give it to your cat just as it is and watch the cat's antics. He will play with it as you never saw a cat play before. He will rub his body against it, scratch at the package, roll over on his back and over the package. He will lie on his back, pick it up with his paws and throw it in the air, fairly going crazy with excitement. Place the package in the pocket of a garment, hang the garment up and the cat will climb up on the garment and fairly tear it to pieces, trying to get at the Catnip.

This is the point we are trying to make. Rat-Nip is just as attractive to rats as Catnip is to cats. That is the reason it has been named RAT-NIP. Rats simply can't let it alone. They are so crazy for it that if you leave a tube of it in any rat infested place, rats will eat right through the metal tube to get at RAT-NIP. This has occurred repeatedly.

Rats Eat Through Metal Tube to Get Rat-Nip



Above is an actual photograph of a tube of Rat-Nip sent to us by Mr. Robert M. Kerr of Fort Lauderdale, Florida.

So anxious were the rats to get at this attractive bait that they gnawed right through the metal tube to get it. Mr. Kerr writes as follows:

"We were wondering where all our rats had gone. For a time we set traps, caught quite a few but couldn't seem to keep them out.

"One of our men bought the enclosed tube of your poison some months ago and then forgot to follow the directions in using. It became misplaced on a shelf and then forgotten.

"Today in cleaning our store room we came across the tube. Then we understood why we had had no rats for months. You can see by the condition of the tube that the rats were so anxious to die by the method you have planned for them that they ate through the tube to get to the contents and then "bluey," no more rats.

"It's a pretty efficient exterminator that has the cooperation of the rodent as well as the human."

(Signed) ROBERT M. KERR.

This is why you can kill bushels of rats with Rat-Nip. It is the only exterminator on the face of the earth that will get every single rat without exception.

RAT-NIP is infallible. Not a single rat can resist it. It absolutely never fails. It gets them all every time. Not one can escape. If RAT-NIP were applied all over the country at one time the entire rat population would be exterminated in a single night.

The trouble with all other exterminators is that rats detect the poisons and will avoid them. Only the unsophisticated or very hungry rats will occasionally eat them, whereas RAT-NIP draws even the wildest old fellows from their lairs and gets them all. They will leave meat, fish, cheese, grain and the choicest foods to get at a piece of RAT-NIP bait. Nothing like it has ever been known.

Made only by

LIQUID VENEER CORPORATION

Fort Erie North, Ont., Can.

Buffalo, N. Y.

MONARCH SEED & FEED CO.,
Corner 6th & Bartlett
Medford, Oregon

PARCEL POST RATES

Shipping Weight	Zones 1 and 2 not over 150 Miles	Zone 3 150 to 300 Miles	Zone 4 300 to 600 Miles	Zone 5 600 to 1000 Miles	Zone 6 1000 to 1400 Miles
	1 Pound	\$0.09	\$0.10	\$0.11	\$0.12
2 Pounds	.11	.12	.15	.18	.20
3 Pounds	.12	.14	.18	.23	.27
4 Pounds	.13	.16	.22	.28	.34
5 Pounds	.14	.18	.25	.34	.41
6 Pounds	.15	.20	.29	.39	.48
7 Pounds	.16	.22	.32	.44	.56
8 Pounds	.17	.24	.36	.50	.63
9 Pounds	.18	.26	.39	.56	.70
10 Pounds	.19	.28	.43	.61	.77
11 Pounds	.20	.30	.46	.66	.84
12 Pounds	.22	.32	.50	.72	.92
13 Pounds	.23	.34	.54	.77	.99
14 Pounds	.24	.36	.58	.82	1.06
15 Pounds	.25	.38	.61	.89	1.13
16 Pounds	.26	.40	.65	.94	1.21
17 Pounds	.27	.42	.68	.99	1.28
18 Pounds	.28	.44	.72	1.05	1.35
19 Pounds	.29	.46	.75	1.10	1.42
20 Pounds	.30	.48	.79	1.15	1.49
21 Pounds	.31	.50	.82	1.21	1.57
22 Pounds	.33	.53	.87	1.27	1.64
23 Pounds	.34	.55	.90	1.32	1.71
24 Pounds	.35	.57	.94	1.37	1.78
25 Pounds	.36	.59	.97	1.43	1.85

CUSTOMERS PLEASE TAKE NOTICE

Our Terms are Strictly Cash with Order. We prefer not to send seeds C. O. D. unless order is accompanied by at least one-third of the amount of order.

How to Remit. Send postal money order, express money order, or check. Stamps will do if your order is for a small amount.

Errors. We exercise every care in handling your orders, but should an error occur, kindly write us at once, and we will adjust it promptly.

All prices in this catalog are subject to change without notice.

Reports—Good or Bad. Will you help us to attain greater success by writing and telling us how our Seeds and Supplies reach you, how they grow and **how you like them?** We will certainly appreciate it. Your criticisms, if you have any, as well as your praises, are desired.

NOTES ABOUT PARCEL POST

Poisons cannot be sent by mail, but may be shipped by express.

Weight limit in all zones 70 pounds.

Non-Warranty. Most of the failures with seeds are due to causes entirely beyond our control, such as unfavorable weather or soil conditions, too deep or too shallow planting, etc., which renders it impossible for us to guarantee success. We therefore give no warranty as to description, quality or productiveness of any of the seeds we send out, and will not be in any way responsible for the crop. If the purchaser does not accept the goods under these conditions, they are to be at once returned.

WE DO NOT GUARANTEE REPLACEMENT OF GOODS SENT BY MAIL. An additional remittance of 5 cents will insure any mail package.

INDEX

MONARCH'S '48 GARDEN ANNUAL

"EVERYTHING FOR YOUR GARDEN BUT THE RAIN"

	Page		Page		Page
Alfalfas	7	Founts, Poultry	39	Plant Foods	44, 46
Alsike Clover	7	Fruitione	44	Plant-Chem	46
Anemone	25	Gladiolus	26	Popcorn	12
Asparagus Plants	21	Garden Tools	41, 44	Potatoes	21
Barley	7	Gopher Traps	43	Poultry Equipment	39
Begonia Tubers	25	Gopher Poison	43	Ranunculus Bulbs	26
Beets	10	Go-Fer-Gas	43	Raspberries	23
Bent Grass	5	Grains	7	Red Clover	7
Beans	8	Grasses	5-6	Red Top	6
Berries	23	Gooseberries	23	Rhubarb Roots	21
Brome Grass	6	Hormone Preparations	44	Rootone	44
Brooders	39	Hose Sprayers	41	Roses	24
Bulbs	26	Hot Kaps	41	Rye Grasses	6
Cabbage	10	Hot Bed Equipment	41	Seeders	45
Clovers	7	Information; planting	4, 9, 11, 14, 15, 17, 19, 20, 27, 29, 31, 34, 35, 38	Seed Grains	7
Compost Maker	46	Insecticides	42, 43	Shears, Pruning	41
Corn, Field	21	Kanota Oats	7	Soil-Soakers	41
Corn, Sweet	12	Ladak Alfalfa	7	Sprayers	45
Corn, Pop	12	Ladino Clover	7	Spray Materials	41, 42, 43, 44, 46
Crimson Clover	7	Lawn Grasses	5	Strawberry Plants	23
Cucumber	12	Mangel Wurzels	10	Sudan Grass	6
Currants	23	Meadow Mixture	6	Sweet Peas	37
D.D.T. Insecticides	42, 43	Mole Traps	43	Sweet Clover	7
Drinking Founts	39	Mole Killer	43	Timothy	6
Dusts, Garden	42, 44, 46	Mouse Nox	43	Tools, Garden	41, 44
Dusters	45	Naphthalene	42	Transplantone	44
Fertilizers	40, 46	Nectarberry Plants	23	Traps	43
Feeders, Poultry	39	Nitragin, Inoculant	46	Vegetable Seeds	8-18
Fescues	5-6	Oats	7	Vigoro	40
Field Grass Seeds	6	Onions	13	Water Founts	39
Fix	44	Orchard Grass	6	Weed killers	46
Flower Seeds	28-37			Weed-No-More	46
				Wheat	7



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